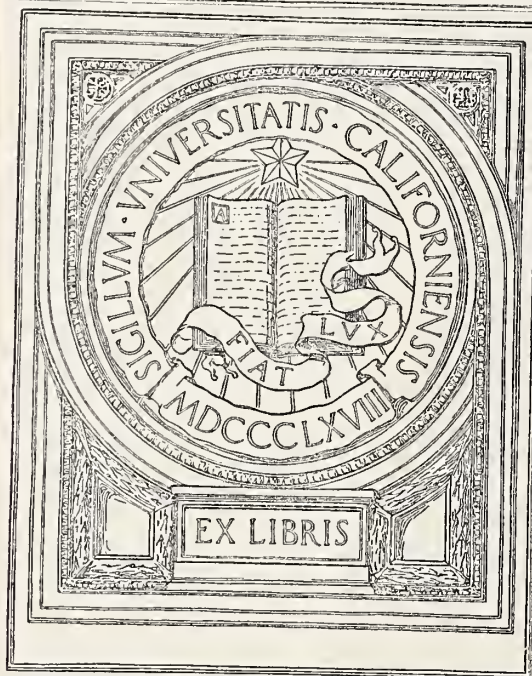


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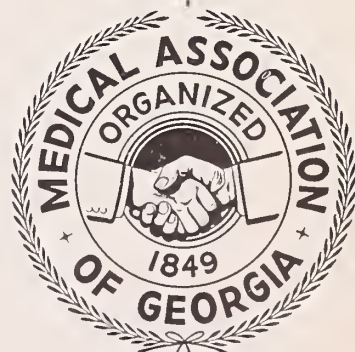
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FUNCTIONAL TREATMENT OF COMPRESSION FRACTURES OF THE SPINE

Seventy-five to ninety per cent of all the compression fractures of the spine treated by the author and his group since 1950 have been successfully treated without manipulation, with early ambulation, and without support.

HARVEY NELSON, M.D., Minneapolis, Minnesota

TO HAVE A MUTUAL understanding in discussing the effects of and the treatment of compression fractures, it is necessary that certain fundamental concepts be clarified.

Compression fractures, as they pertain to the spine, are impacted fractures of the bodies of vertebrae. Like any other impacted fractures, when reduced, they tend to eventually settle back to the degree of their original impaction. They are best disclosed by lateral x-rays of the spine, although their presence can be suspected by experienced examination of anteroposterior views. Adequate x-rays of the dorsal and lumbar spine including lateral views are essential. Oblique x-rays of the dorsal and adjunct are necessary where fractures of the posterior arch are suspected.

Classification

A classification into two types: (1) Stable and (2) Unstable seems to be adequate. Fracture-dislocations with cord involvement might understandably be a third classification, but these are actually a complication of one of the unstable types. The stable compression fractures are usually designated by the degree of compression. The unstable types may be subdivided into (1) Fracture-dislocations and fractures of the neural arch and (2) Posterior centrum fractures with or without hooked facets.

Review of Anatomy

A detailed review of the anatomy of the spine is not at all necessary and is only applicable here to

explain late pain and disability on the basis of its disruption. It is assumed that we understand the fundamental structure of a vertebra as a basic unit of the spine and how these units are held together by various ligaments with the interposition of the intervertebral disc and its contained nucleus pulposus. The associated dorsal and lumbar curves are important in that any severe accentuation or disturbance of their normal contour is apt to lead to static or fatigue pain. The attending muscles act as levers on the spinous and transverse processes and also, in the case of the lumbar spine, on the thoracic cage. The lower vertebrae have been fused into a solid sacrum to afford firm fixation for these muscles to insert and thereby control the erect position and movement of the lower spine.

There are in addition to this, variations in the cervical, dorsal, and lumbar areas which are exceedingly important, as any consideration of the treatment of compression fractures has to differentiate between these three groups.

Cervical Vertebrae

In the cervical spine the bodies are smaller and the facets and transverse processes relatively widely spaced. The facets gradually assume a flatter or more horizontal position from the dorsal area upward, and with this they have a wider sliding range. Thus, together with the free action of long muscles attached to the usual levers, cervical facets contribute toward the greatest degree of mobility in

any part of the spine. As a result compression fractures here are frequently accompanied by tearing of the supporting ligaments and fractures of the lateral and posterior bony masses, and are in effect fracture-dislocations. To determine this, x-rays of all cervical spine injuries where the severity of the injury does not contraindicate it, should include three lateral views in the physiologic, flexed, and hyperextended positions. Obviously, support during convalescence in injuries in this area is of primary importance. On the other hand prolonged immobilization is not consistent with functional treatment. It is not necessary in the uncomplicated case beyond six weeks if soft tissue residuals are ready for rehabilitation and bone stability has been established by repeated x-rays.

Dorsal Vertebrae

In the dorsal area the facets face anteriorly and posteriorly and are more vertically directed so that they inhibit forward and backward bending but permit some lateral rotation and lateral flexion. The spinous processes to some extent lie upon one another like shingles and thereby allow only moderate flexion and little extension. The thoracic cage which attaches to the dorsal vertebrae by special facets on each transverse process and on each side of the posterior portion of the vertebral body in a superior and an inferior location—six locations on each dorsal vertebra—contributes considerably toward the relatively immobile flexion and extension of the dorsal spine. Finally, as though recognizing the bony obstacles, the musculature effecting dorsal spine movement is less powerful. We have herein a very obvious explanation why dorsal fractures cannot be reduced, need not be supported, and a reason why most of these fractures recover so well. We have in the more severe fractures an explanation of protracted localized pain as the inferior facets of the vertebra above might become perched, so to speak, on top of the superior facet of the vertebra below, causing persistent mechanical stress and derangement. In the 12th dorsal vertebra, and sometimes in the 11th, there is an abrupt change from the anteroposteriorly facing dorsal facets to the sagittally placed lumbar facets. The superior facet of the 12th dorsal vertebra is typical of the dorsal type and the inferior facet of the lumbar type. This fact, together with the fact that the 11th and 12th dorsal vertebrae are only loosely attached to the thoracic cage by a single lateral articulation on the margin of each pedicle, and then only to a floating rib, has caused us to include for our purpose the 11th and 12th dorsal vertebrae in the lumbar group rather than the dorsal.

Lumbar Vertebrae

In the lumbar spine we have sagittally placed facets with a larger concave superior facet in which a smaller, slightly convex facet of the vertebra above can slide, and probably pivot slightly, through a range which is restricted by the margins of the vertebral body and the posterior bony processes. In the lumbosacral region, to supply the additional strength demanded of them, the facets are about of equal size, are usually more widely spaced, and are oblique in their direction rather than sagittal. The lumbar muscles working on the levers of the spinous processes and the thoracic cage are well developed and strong. Lateral flexion in the lumbar spine does occur but lateral rotation is very definitely interfered with by the sagittal position of the facets. It is likely that some injury or disruption of the posterior, and particularly the interspinous ligament, occurs in severe compression fractures.

Intervertebral Discs

One-fourth of the length of the pre-sacral spine is made up of intervertebral discs. The thicker the disc, the greater the movement, so the discs are thicker in the cervical and lumbar regions. These discs therefore are an integral part of the spinal column and play an important part in the stability and mechanics of the spine. They are tough and withstand the mechanical force that causes a compression fracture better than the bony bodies of the vertebrae.

Three components of the disc area should be considered. The first of these are the cartilage end-plates which are not in the true sense of the word an integral part of the disc. The structure of the disc itself is complex and has two component parts, the annulus fibrosus and the nucleus pulposus.

The *cartilage end-plates* cover the central part of the inferior and superior surfaces of the vertebral body. They are surrounded by the epiphyseal ring anteriorly and laterally and extend almost to the rim of the body. Their function is primarily protective similar to the cartilaginous covering of the ends of other bones that are exposed to pressure. They also act as semipermeable membranes for fluid exchange between the vertebral bodies and the discs.

The *annulus fibrosus* is a fibro elastic ring which surrounds the nucleus pulposus and is firmly attached to the epiphyseal ring of the vertebral bodies and the cartilage end-plates. The arrangement of its fibers, together with its slight elasticity, permits a small amount of movement between the adjacent vertebrae. Its strength is considerable as is attested by the relative infrequency with which its disruption is apparent in compression fractures. The criss cross arrangement of the fibers of the annulus, as in the

abdominal musculature, adds to its strength. It therefore adds stability to the spinal column, permits movement between the vertebral bodies and at the same time acts as a check ligament on motion. It retains the position and shape of the nucleus pulposus. With the nucleus pulposus it acts as a shock absorber. It is, however, subject to all the processes of adult degeneration.

The *nucleus pulposus* is the plastic, more or less central portion of the disc, which, like fluid, is incompressible, but has the capacity of freely altering its shape under pressure unless degenerative changes are present. It can flatten out and thereby distend the annulus whose elastic fibers become somewhat elongated. The annulus absorbs and restrains the mechanical stresses of force and movement in this shock absorber mechanism. The nucleus pulposus by changing its shape and shifting its position transmits pressure equally over the annulus and the cartilaginous end-plates. We have, in the nucleus pulposus, the basis for an adjustable fulcrum.

These combined functions are exceedingly important in compression fractures. The intervertebral disc maintains its continuity even when forces are sufficiently severe to cause compression fractures. If the intervertebral disc is crushed by the same mechanism that causes a compression fracture, it is useless to expect its restoration because the adult disc is avascular and cannot repair itself. Almost never do we observe clinical disc syndromes as a direct result of compression fractures.

Mechanics of Spine Movement

We should have at least some elementary understanding of the mechanics of spine movement if we are to attempt to evaluate the effect of compression fractures upon spine function. In the first place, it is understandable how limitation of motion at the fracture site is not of itself a real source of disability as its effect on total spine movement is not significant. However, a correlation of the anatomy with the mechanics of spine movement, I believe, offers us an answer to the functional end results that we are obtaining. In spite of knuckling deformity, accommodation at the fracture level can be made by the reparative process so that no localized pain or gross interference with mechanical function of the spine as a whole need occur.

Originally it was felt that the fulcrum for vertebral bodies to move upon one another was in the articular facets. Calve and Galland in 1930 established the fact that the nucleus pulposus was the fulcrum. A casual observation reveals the fact that the spinal canal is posterior to the nucleus pulposus and is necessarily the part that would have to be kept relatively immobile. The transverse processes are in

effect the dividing line between the muscular forces affecting flexion and extension and these are posterior to rather than at the fulcrum of the nucleus pulposus. The anterior longitudinal ligament in front of the vertebra is a broad strong inelastic fibrous band. The posterior longitudinal ligament is a rather flimsy and elastic structure. The ligamentum flavum, a ligament of the vertebral arches, is composed of elastic fibers and is therefore elastic and contractile and relatively undisturbed. The capsule of the articular facets is sufficiently relaxed and elastic to allow freedom of movement. The strong interspinous ligament contains some elastic fibers and is obliquely directed so as to permit separation of the spinous processes vertically to a limited degree. In severe flexion mechanism, pericapsular facet trauma and disruption of the interspinous ligament does occur.

If our theories are correct, therefore, stabilization of the spinal canal must then be accomplished to a considerable extent by a sliding motion of the facets. The relatively fixed anterior longitudinal ligament, the compressibility of the intervertebral disc and its nucleus pulposus upon an adjustable fulcrum, together with a sliding motion of the facets facilitated by the elasticity of the posterior ligaments all contribute toward this type of mechanical movement.

An analysis of x-rays taken in the flexed and hyperextended position of the lumbar spine would tend to bear out the assumption that the nucleus pulposus is the fulcrum with the accommodation posteriorly accomplished by a sliding motion of the facets rather than a pivoting at this point. It is of interest to note that forward flexion in the lumbar spine is largely accomplished by a straightening out of the normal lumbar curve rather than an actual flexion. The anatomical variations of the articular facets in the different segments of the spine are of great importance to the mechanics of the spine and of considerable importance in the functional treatment of compression fractures.

Causes of Pain

It is generally agreed that the indices of an end-result in a compression fracture primarily are pain and secondarily limitation of motion. It would be well, therefore, to consider the causes of late pain in these cases.

1. The cause of localized late pain in the average uncomplicated compression fracture is probably stress and strain upon the posterior ligaments and facets or a possible derangement of the facets. The healed fracture of the body itself would not be a source of pain.

2. Disruption of the intervertebral disc and its

COMPRESSION FRACTURES / Nelson

nucleus pulposus could be productive of late pain but it is relatively infrequent. It is associated with the more severe fractures and is frequently resolved by spontaneous fusion.

3. Instability is a definite source of pain usually noted only in the severe compression fractures or fracture-dislocations. If spontaneous fusion does not occur, operative fusion may be necessary. Patient observation may note spontaneous fusion.

4. Fixation, contraction, and fibrosis of muscles and ligaments secondary to the use of plasters and braces has been a cause of late discomfort, particularly in the lumbosacral area. In addition, the lack of back exercise and activity during convalescence can be just as great a source of this type of discomfort. Too often we caution our patients to protect the back when regulated back exercise and physical therapy might overcome the fixations and contractions that are the source of trouble.

5. Muscular and ligamentous injury in the lumbar and lumbo-sacral region, associated with the original force causing the compression fracture, may be a source of low back pain.

6. Compensatory increased lumbar lordosis may be a cause of low back pain.

7. Direct root pressure should not ordinarily occur unless there is fragmentation or displacement. Actually, the intervertebral foramen is increased in diameter by a simple compression fracture. Root or cord trauma and its sequelae may occur.

Rate of Union

In addition to these basic concepts here is one more which is important. That is the fact that vertebral bodies are cancellous bone. As such they firmly unite, in the absence of a pathological background, in six to 10 weeks. Anyone who has attempted to reduce a fractured os calcis, which is cancellous bone, knows that union has progressed to such a degree even in 10 days to two weeks that the fragments can no longer be manipulated.

History

The metamorphosis of the treatment of compression fractures is an interesting one. Before the time of adequate x-rays no specific treatment was administered except in the so-called "broken back," which was a fracture-dislocation with paralysis. In the 1920 era, as improved x-rays permitted a diagnosis, treatment was greatly influenced by the memory of those prior paralytic cases as well as the fear that some serious complication might occur. Prolonged bed rest, casts, and heavy braces were a heritage that took years to overcome.

In 1929 Davis reported a method of reducing

compression fractures by forced hyperextension under anesthesia, utilizing the tough anterior longitudinal ligament to pull out the compression. A few years later Baker used a method of gradual reduction with a special frame. In 1933 Webb first described the use of a reverse Gatch bed for the same purpose. Since then the number of methods and procedures described would of itself compose a paper of major proportions. The use of casts followed by braces for a year, year and a half, and even two years was common practice. About the mid 30's we began to have the courage to ambulate these cases with plaster jackets but the prolonged use of braces continued. The thought was to hyperextend the spine enough so that "weight bearing would ride back on the facets and not on the injured centrum." About this time some began to treat compression fractures with hyperextension reduction and plaster jackets, reasonably early ambulation and then remove the plaster after a three months period with no brace—an attempt to treat them more like other fractures. About this time the second World War began. My recollection of the army manual was that it gave very specific instructions for reduction and the use of extensive plaster jackets.

During this twenty year period our enthusiasm for the fact that compressions could be pulled out, clouded our thinking. We did not follow up our cases with late x-rays to show that our reductions were not being maintained. We continued to think in terms of casts and braces and protection of the back against some intangible complication. We failed to think in terms of rehabilitation, not realizing that the stiffness and atrophy resulting from our very treatment made rehabilitation more difficult.

Following the war we began to think more in terms of early ambulation, physical therapy, and early rehabilitation. Several facts raised doubt as to whether reduction of the compression was the important factor in obtaining a good result and whether Watson-Jones' statement that a "perfect recovery is possible only if a perfect reduction is insisted upon," applied here. In 1949 E. A. Nicoll published the results of treating a number of compression fractures in coal miners in England without reduction and without support. The process of metamorphosis seems to be getting back to where it began.

All this time we had certain misgivings about our treatment. We found it difficult to get patients to discard their casts and braces because of resulting stiffness, atrophy, and fear. The economic stress placed on patient and employer alike was disturbing. We were occasionally jolted by the appearance in our office of patients with old healed, well-defined compression fractures, without symptoms, and fre-

quently without a well recollected history of disability. We were disturbed, too, by the fact that we had not maintained the good reductions obtained in our manipulations—our reductions settled down. Late functional results were usually good in those cases in which we had the opportunity of re-examination after a few years. We found that dorsal fractures could not be satisfactorily hyperextended and reduced, in spite of which they usually got well. The thought naturally evolved that certain lumbar fractures might not need reduction. As we became more mindful of physiotherapy, muscle exercise, and early rehabilitation we realized that prolonged immobilization of backs was provocative of atrophy, weakness, limited motion and pain, and we began to look for means of preventing this. Early ambulation with plaster jackets was a decided step forward. In time this led to early ambulation without plasters or braces in selected cases. The next step of treating stable compression fractures with bed rest, without reduction, until comfortable, followed by early ambulation, early muscle exercises and physiotherapy, and as early rehabilitation as the patient's tolerance would permit, was approached with somewhat more apprehension; but it was bolstered by our inability to successfully reduce dorsal compression fractures and by our inability to prove maintenance of reduction of our lumbar fractures over the years.

Basis for Functional Treatment

Our original reason for functional treatment was prior to 1950 when we found that we could not reduce dorsal compression fractures and began to treat these cases without support. Since 1950 we have gradually increased the scope of the cases treated in this manner. At first only the dorso-lumbar fractures of lesser degree were so treated. Now some of the men in our Twin Cities area treat all cases functionally, making no differential of the unstable cases except to fuse, at times, the area where localized pain from instability persists. Some prefer to protect unstable or suspected unstable cases with a light plaster jacket for about eight weeks without reduction or hyperextension.

On the basis of the anatomical and mechanical structure of the spine, together with our impressions of the probable sources of late pain and disability, we have an explanation why our functional results are not dependent upon anatomical reduction and we can outline a physiologically rational method of treatment. The advantages of avoiding plasters and braces and the direction of our attention toward muscular exercises, early activity, and earlier return to work demands our careful consideration. In our experience, reductions initially good are not by late x-ray studies satisfactorily maintained. These reduced impacted fractures, as elsewhere, tend to

settle to the position of original impaction. Where compression fractures are not sufficiently severe to irreparably disrupt the posterior ligaments and facets, or to cause instability, or where the kyphosis is not sufficiently marked to cause static strain and fatigue, there is not much to be gained by reduction and immobilization as far as the end-result is concerned. The anatomical compression of the body is not the source of late pain exception as it might cause stress on its mechanical adjuncts.

The adaptability of the intervertebral discs, the type of movement that is present in the facets, and the elasticity of the posterior ligaments are all certainly enough to permit mechanical adjustment in compression fractures of average degree and sufficient to avoid late pain. In the dorsal region the relative immobility of the dorsal spine facilitates repair. Reduction of the thoracic vertebra cannot be accomplished in any event. It is conceivable that reduction and prolonged immobilization in the hyperextended position would tend to cause contractures and fixations in the very ligaments and muscles that might readily adapt themselves to changes in contour of the vertebral body.

What Is Functional Treatment?

Someone has aptly described this as merely studious observation. The very simplicity of it hardly makes it a treatment at all. We have treated some of our dorsal compressions as ambulatory office patients with good results.

The average dorso-lumbar compression fracture is put to bed in a hospital with no reduction of any sort being attempted. The duration of his confinement to bed depends on his acute symptoms and ileus. In this respect it resembles a good deal early ambulation after operative procedures. In general this period of bed rest has gradually been decreased over the several years. Whereas we used to plan on two or three weeks, patients now begin to get up more often in five to six days. Hospitalization now is two to three weeks and often less. Hot packs to the abdomen and back add materially to relieving the patients' ileus and his back pain. Sedation is used as necessary. Repeated muscle exercises in bed are encouraged. After the patient gets up and about he is requested to walk as much as possible, be active, and to follow some daily back exercises. It follows that as early ambulation as the patient himself will tolerate is our objective. We do not feel that harmful results are encountered thereby. Except in obvious or suspected unstable cases no cast or brace is applied. In close to 90 per cent of the cases there is no need to consider instability. The best interests of all concerned are served by explaining the nature of the injury to the patient, usually show-

COMPRESSION FRACTURES / Nelson

ing him the x-rays, outlining the course of treatment and obtaining his cooperation. We have found that patients do not have the fear of compression fractures they once had, but nevertheless, encouragement and psychotherapy is important. Listening to their problems and discussing them is better than minimizing their complaints. Many of these patients do have a fatigue ache, particularly in the lumbo-sacral area, for a year or two. It is important that they know you understand this and important that they are informed that this is not harmful and in most cases ultimately disappears. Most of our cases are given a course of physical therapy before returning to work.

Where plasters are applied we are convinced that no extreme position of hyperextension serves any real purpose because of eventual settling of the reduction. A neutral position might help promote spontaneous fusion and avoid an unnatural fixation of the posterior muscles and ligaments. Plaster jackets should not be applied too long. When a plaster jacket is removed the patient should be hospitalized, given a course of physical therapy and gradually returned to full ambulation before discharge from the hospital. Braces vitiate rehabilitation and are indicated only as adjuncts in rehabilitation where ultimate fusion is under consideration.

Evaluation

The fact that pain is the principal disabling factor and so tremendously dependent upon individual tolerance, medico-legal interests, and other conflicting conditions, makes an evaluation in terms of percentages one that has little value except when considered from a long range standpoint. Our experience in terms of patients' comfort and attitude, shortening of disability, and better end results has been gratifying.

With the experience gained over a seven year period in which we and others have gradually increased the scope of our functional treatment of compression fractures, we can now talk a bit more authoritatively from a statistical standpoint. At the present time, cases of others in the Minneapolis area who are treating compression fractures functionally are being accumulated. We have available at this time a preliminary summary of 231 cases so treated over a period of seven years by five different groups, including our own. This number should be substantially increased when the survey is completed. In none of these cases has there been any reduction of the fracture or any type of manipulation. All of them have been ambulated early. Supports were seldom used. One orthopedist stated that he had used a light brace for four to six weeks, but no cast, as symptomatic treatment in two or three cases out of

thirty-five treated functionally. Another group applied a cast early without reduction in their unstable cases for a period of two to two and a half months. This same group had applied flexion casts for four to five weeks as symptomatic treatment in not more than two or three cases out of a total of sixty cases treated functionally. One group of four orthopedists applied no early support whatever in 42 cases, even in their severe and unstable fractures. They preferred to wait for persistent symptoms of instability, if present, and then do a fusion which they incidently had not found necessary in their own cases. It was their experience that most of these either stabilized or fused spontaneously. In two of their compensation cases a light lumbo-sacral support was applied. They had operated on two cases, one in 1952 and another in 1955, out of a total of 136 which were referred to them for medico-legal evaluation one to three years after injury. One group, which was a free service, treated 50 cases of all degrees of compression functionally, with no rigid braces or casts and only a light lumbo-sacral support later in one patient. That all degrees of compression were taken care of on this service is shown by the fact that during the same period of time there were five fracture dislocations with paraplegia—an unusually high number. In this group of 50 were six compression fractures from shock treatments, all of which were reported without complaints in two weeks and in all six cases the shock treatments were resumed in two weeks. In our own group of 44 cases, we have used a light duck lumbo-sacral support in two patients, more for a psychic effect than for any support. In one of these the patient had an old extensive spinal fusion for tuberculosis with a new compression fracture of L2 plus a fracture of the graft at this level. A light lumbo-sacral support, which he wore for only a short time, was applied at his insistence. Recovery was complete. The other case was a medico-legal problem in which a light similar support was applied for symptomatic reasons.

We have fused two dorsal compression fractures, one before the present series, for persistent localized pain from perching of the facets. We have had no occasion to have a fusion done for persistent pain from instability. No casts or rigid braces have been applied in any of our series.

Complications have been few. Even in severe and unstable compressions the need for operative intervention has been infrequent. This, in spite of the fact, that in some cases severe grade IV and pedicle fractures have been treated without any support. Two interesting complications have been reported to me. One of these is the case of pulmonary embolism which occurred on the thirteenth day after injury. The other does not actually belong in

our series as he had multiple serious injuries and was not seen until two months after the accident. He was thought to have a prolapsed disc. At operation he was found to have extensive arachnoid adhesions, probably on a hemorrhagic basis. We are not aware of any prolapsed intervertebral discs that have been operated upon at the level of the compression fracture. We have been informed of one herniated disc removed at a low lumbar level in a case (not in our series) which had four lower dorsal compressions twenty months earlier. It was presumed here that there was a relationship between the accident and the prolapsed disc.

None of the five groups above had any difficulty

Conclusions

Functional treatment of compression fractures without reduction, plasters, or braces, is applicable to a large number of cases which can be selected easily and safely. Compressions of Grade I, II, and III (up to 65 per cent) can be safely treated functionally in the absence of evidence of fractures of the pedicles or posterior arch. Although some are treating Grade IV compressions with unstable or potentially unstable components functionally without support, this cannot now be made a generalized recommendation except as being within the decision of an experienced orthopedist. It is our opinion that

Length of Disability Functional Treatment						
		Light Work	Heavy Work	End Result		
GROUP I		2 to 4 months	3 to 6 months	Better		
GROUP II		2 to 3 months	6 months	Better		
GROUP III		6 weeks	3 months	Remarkably better		
GROUP IV		6 to 8 weeks	3 to 4 months	Much better		
GROUP V		6 to 8 weeks	4 to 6 months	Better		

Possibly a review of our own cases in 1956 would be of some interest:						
Case	Occupation	Level	Hospital	Disability	End Result	Other Conditions
WB	Insurance	D11	3 weeks	6 weeks	15%	Hypertension
HB	Janitor	L1	2½ weeks	?	0	Fracture os calcis
						Fracture hip later
MH	Saleslady	L1	3½ weeks	12 weeks	15%	—
MK	Cook	L1	3½ weeks	6 weeks	10%	—
JL	Housewife	D12				
		L1	2 weeks	2 months	?	—
ES	Housewife	L2	3 weeks	?	?	Cataracts
WT	Maintenance	D6&8	0	7 weeks	0	—
TB	Carman	D7	10 days	2½ months	0	Fracture os calcis

with complications whatever arising from the medical-legal standpoint.

A final evaluation of disability, as we have previously stated, is difficult because of the extreme variability of influences not directly concerned with the local injury and its healing. What we think these patients can do work-wise is not always consistent with what we accomplish. However, we feel we are obtaining a marked improvement. I am not prepared at this time to try to list the disabilities of all these individual cases. These five groups have been asked, "What is your average length of disability under functional treatment; and are your end results better, the same, or worse as compared with the old treatment of reduction and cast?" The answers again are interesting because they reflect both a conservative and enthusiastic approach to the treatment. However, in all groups, healing period was remarkably shortened by functional treatment. All five groups were very emphatic in their opinion that end results were better.

75 per cent to 90 per cent of all compression fractures come within the limitations described above and can therefore be best treated without manipulation, with early ambulation and without support.

We feel that in the absence of any complicating factor requiring it, reduction serves no useful purpose. Where plaster jackets are applied it should be remembered that the bone involved is cancellous bone which should be well united in about eight weeks. The cast should then be removed and rehabilitation started.

A shorter, more comfortable, and more active convalescence without ill effects justifies the procedure and fulfills the criteria of rehabilitation. Maintenance of normal elasticity and strength of the muscles and ligaments accommodating to the injury is accomplished. The psychological response of the patient is impressive as is cooperation in rehabilitation from early convalescence to early resumption of activity.

78 S. Ninth Street

MEDICAL MANAGEMENT OF PERFORATED PEPTIC ULCER

The indications, methods, and experiences with medical management of perforated peptic ulcers are reviewed. An illustrative case is presented.

M. MURRAY SCHECHTER, M.D., Miami, Florida

IT IS TO BE EMPHASIZED that perforation of a peptic ulcer is a surgical disease and the principle and most desirable method of therapy is surgical closure of the perforation. In recent years, however, it has been adequately demonstrated that certain groups of patients with perforation will respond excellently to medical therapy. In still other patients, surgery is not feasible because of the patient's condition or because of lack of adequate surgical facilities. The incidence of survival, methods, and experiences with medical therapy of perforation is not widely known in this country. The purpose of this paper is to present briefly these principles and demonstrate their use with case presentation.

Statistics on Ulcers

It has been estimated that approximately ten per cent of the adult population of the world will, at one time or another, develop a peptic ulcer during his or her lifetime. These ulcers will develop in an area reached by the acid and pepsin secreting cells of the gastric mucosa; namely, the lower esophagus, stomach, duodenum, Meckel's diverticulum, and in special circumstances, the jejunum. Any disease or process which affects approximately one tenth of the population of a country will have considerable economic and social as well as medical significance. The statistics showing the relative incidence of complications resulting from peptic ulcer are also quite surprising. Emery and Monroe¹ in 1935 summed up the relative frequency of the three major complications of peptic ulcer as follows: approximately one fourth of all peptic ulcers develop manifest hemorrhage at one time or another; approximately ten per cent develop obstruction; and approximately eight per cent will perforate.

Acute perforation is the most dangerous complication of peptic ulcer as far as the mortality rate

is concerned. Although its total incidence is rather small when compared to hemorrhage and stenosis, it is still a common condition seen by the emergency service of any large metropolitan hospital and is seen fairly frequently in less urban practices. Although the mortality rate has decreased considerably since the advent of antibiotics, it is still significantly high so that perforations represent an acute emergency when they occur. The chances of perforation in a peptic ulcer have been variously estimated as ranging from one to twenty-five per cent but conservative estimates place it in the region of approximately eight per cent occurrence in all peptic ulcers. It is interesting to note that the incidence of perforated peptic ulcers seems to be increasing out of proportion to the increase in the number of ulcers being recognized. Of further interest are the studies reported from England and Sweden indicating that, during air raids and at times of stress during the last war, the incidence of perforation in peptic ulcer increased to as high as fifty per cent. Although the old literature showed a greater incidence of gastric ulcers than duodenal ulcers and therefore a greater incidence of perforated gastric ulcers than duodenal ulcers, recent studies indicate that perforations resulting from duodenal ulcers are more frequent and that a duodenal ulcer is many times more prone to perforate than a gastric ulcer. An offshoot of this study are the figures showing that perforation may be ten times more frequent in males than in females. Statistically, perforations show a significant peak in incidence during November and December with the lowest incidence in August. Most perforations occur during the daytime with a peak between 4 and 6 P.M., and more single people perforate than do married individuals.

Treatment

The usual treatment for perforated peptic ulcer

has been operative closure. However, during the past eight years, considerable discussion and practice has occurred in respect to conservative therapy of a perforated peptic ulcer. The major reasons for consideration of this form of treatment are:

- a. Frequently at operation it is found that the perforated ulcer has sealed by itself.²
- b. In the formes frustes type of perforation the results have been good when conservative therapy has been used.³
- c. Patients who have not been operated on for various reasons have recovered under conservative therapy particularly when this therapy was initiated early and especially so since the advent of antibiotics. Hermon Taylor⁴ is presently one of the leading proponents of conservatism in the treatment of perforated peptic ulcer and his mortality rate is approximately eight per cent.⁵ This compares favorably with

the adjusted mortality rate for surgical therapy of a perforated ulcer. The major factor in the mortality of a perforated peptic ulcer, whether it is treated medically or surgically, seems to be the time when therapy is begun in relation to the onset of the perforation. The longer the duration before therapy is started the higher the significant mortality rate. Other significant factors include distention of the stomach with food, the condition and age of the patient, and location of the perforation. The main goal of medical therapy in acute perforation is spontaneous closure of the perforation and resolution of the associated peritonitis. Consequently, the four major weapons of medical therapy are as follows:

- 1. *Gastric suction.* The general method of therapy features the use of the Levin tube with constant suction. If the patient has recently eaten, the stomach is first emptied, but not lavaged, with a large gastric



Figure 1: Erect chest x-ray demonstrating the presence of free air under both leaves of the diaphragm.

PERFORATED ULCER / Schechter

tube. Suction is continued constantly until approximately twelve hours after rigidity disappears from the abdomen. Most workers feel that the properly functioning Levin tube constitutes the single most important element in the medical therapy of the perforated ulcer.

2. *Antibiotic therapy.* Parenteral penicillin and streptomycin should be used in sufficient amounts to insure adequate blood levels at all times. A safe procedure would be to inject 600,000 units of aqueous penicillin and one gram of streptomycin intramuscularly as soon as the patient is seen. This is followed by 600,000 units of procaine penicillin every six hours and one-half gram of streptomycin intramuscularly every six hours. These doses should be continued for at least thirty-six hours after rigidity has disappeared and the oral intake of food is again started. The parenteral forms of the broad spectrum antibiotics may be added if desired.

3. *Neutralization of acid.* This should be begun as soon as spontaneous closure has occurred, and may be done with either a constant intragastric drip through the previously inserted tube or by frequent Sippy feedings supplemented by antacids.

4. *Supportive therapy.* This is of the utmost importance and should include saline infusions and glucose, parenteral potassium when the circumstances warrant it, and whole blood transfusions if necessary.

We have also seen dramatic results occur in patients with a picture of intractable shock with the use of parenteral adrenal cortical hormones. It is to be emphasized that these drugs are not to be routinely used in perforated peptic ulcers; but on rare occasions, where the patient is thought to be in severe or intractable shock, we have felt that the use of cortisone in conjunction with the other methods of therapy has been life saving.

Chronic Perforation

A word should be said about chronic perforation, or the so-called "penetrating ulcer." This condition generally calls for the regimen of medical therapy as follows:

1. Bed rest.
2. A continuous twenty-four hour gastric drip using an alkali or antacid should be used or may be

substituted for by frequent hourly feedings during the day and two hourly feedings during the night with nightly or morning and evening aspirations. A suitable antispasmodic should be injected parenterally during the time that penetration is thought to be occurring.

Case History

The general consensus of conservative opinion in this country is that the preferred treatment of acute perforation is still surgical closure of the perforation if at all feasible. However, there are frequently instances where surgery may be contraindicated or refused or where spontaneous closure is thought to have already occurred. It is in these latter circumstances that medical therapy is most applicable. This group is composed chiefly of:

1. Formes frustes ulcers.
2. Perforations less than twelve hours old which show signs of improvement.
3. Perforation attended by shock or other poor risk patients.
4. Late perforations which have sealed off and formed abscesses.
5. Individuals where the diagnosis is equivocal.
6. Situations where surgery is not immediately available, such as aboard ship or in isolated areas.

Summary

The indications, methods, and experiences with medical management of perforated peptic ulcers are presented and reviewed. At the present time, medical treatment of this complication is to be considered the more radical method of therapy and should be reserved for the small group of patients in whom there is proper indication. Although most patients are candidates for surgery, it is well for the practitioner to be familiar with an alternative method of therapy.

2759 Coral Way

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THE PREOPERATIVE EVALUATION OF THE CARDIAC PATIENT

SIMONE BROCATO, M.D., Columbus, Georgia

THAT MOST CARDIACS tolerate surgery surprisingly well has adequately been demonstrated in recent years by the many corrective procedures performed on patients with congenital and acquired heart lesions. Nevertheless, the cardiologist is frequently called upon for pre-operative evaluation of known and suspected cardiacs. He often determines the feasibility of such elective procedures as hemorhoidectomies, correction of varicosities and herniae, removal of benign tumors, etc. At other times, consultation is requested to assist in diagnosis since diseases such as coronary occlusion, pulmonary infarction, and dissecting aneurysm may mimic the "acute abdomen." In such circumstances, skill and careful deliberation are paramount for he may mistakenly advise against operating for an acute gangrenous gallbladder or a perforated ulcer. Often his duty includes the preparation of cardiacs for necessary surgery; usually this is for urinary retention, fractured hips, obstructed herniae, complications of peptic ulcers, and gallbladder disease.

Case History in Treatment

The most valuable part of the preoperative examination is the history, for it is with the unknown cardiac, compensated but with diminished reserve, with whom the unwary surgical team may get into difficulty. One may sit down for ten or fifteen minutes and gain an excellent perspective of cardiac function by simply talking to the patient. A history of previously occurring rheumatism, syphilis, and long-standing hypertension becomes more important in older people because of the added factor of diminished coronary circulation. The patient's exercise tolerance is an unexcelled indication of cardiac reserve. Thus, it is more important to know if Susie has to sit down and rest after mopping half the kitchen floor (whereas she formerly could clean the whole house), or if Mr. Jones has begun to experience angina during his weekly eighteen holes, than to "see what the EKG looks like." The presence of

The author draws on his personal experience in this practical discussion of operative hazards faced by the cardiac patient.

increased staircase dyspnea, orthopnea, paroxysmal nocturnal dyspnea, and pedal edema are of utmost importance. Previous myocardial infarctions and consequential sequelae may at times be detected by questioning only. Recall that a majority of people with coronary insufficiency, or who have had infarctions, do not have demonstrable cardiac enlargement or other significant physical findings; furthermore, the electrocardiogram is frequently entirely normal. Yet, all of this information is available, and readily obtainable, in the history.

Examining the Patient

During the physical examination, observation must not be confined to the heart since valuable information may be obtained elsewhere. The presence of generalized arteriosclerosis is easily determined from inspection of the lower extremities and palpation of peripheral arteries. The fundi, also, will frequently reveal the degree of arteriosclerosis, in addition to retinal changes indicative of other diseases of the cardiovascular-renal system. The presence and extent of varicosities, old thrombophlebitis, and other diseases of veins must be noted since they may be important during the post-operative period. The amplitude and efficacy of respiratory excursions and the limitations imposed by obesity, emphysema, and scoliosis of varying degree are important. Pulsus alternans, distention of neck veins, basal rales, mild hepatic tenderness, pedal edema, and other evidences of cardiac failure may be missed unless specifically looked for. At the cardiac area one may detect cardiomegaly, valvular lesions, or gallop rhythms, and other auscultatory phenomena which may indicate the presence or absence of severe physiological disturbances (i.e., bundle

CARDIAC PATIENT / Brocato

branch block, complete block, etc.). Of particular interest to the surgeon and anesthesiologist is the presence of aortic stenosis, aortic regurgitation, or extensive arteriosclerosis, and particularly the former, since by virtue of vagal reflexes mediated through the carotid sinus, these people are susceptible to sudden death from ventricular fibrillation or cardiac standstill.

Heart block and other arrhythmias occasionally are detected only during physical examination, for these are frequently transient and may not be revealed by an electrocardiogram. Some months ago the author was asked to evaluate an octogenarian with a fractured hip and severe hypertension and found her to be in fair condition (considering the group as a whole, who are generally surpassed only by urological cases as poor risks). The next day, however, while "stopping in" he found a pulse of 48 and other clinical signs of complete heart block. The orthopedist was readvised, and he decided that immobilization could probably produce a satisfactory result; surgery was then cancelled, and the conservative regime proved adequate.

The electrocardiogram, finally, may reveal unexpected cardiac disease, damage sustained in past or recent infarction, severe anatomical or functional disturbances suggested by bundle branch block, and may confirm the presence of ischemic heart disease. Occasionally one encounters arrhythmias such as multifocal premature, auricular flutter with slow ventricular rate, and others, the nature of which may be revealed only with the electrocardiogram. The examination is not complete without this aid. *It will not*, however, reveal abnormalities in a large proportion of arteriosclerotics; it will not diagnose congestive failure; it will not indicate when the patient is digitalized, but of course, may show evidence of digitalis medication and suggest intoxication.

Specific Lesions

Speaking of specific lesions, hypertension alone, regardless of degree, in the absence of renal and cardiac decompensation, or cerebral involvement, offers no particular problem. Long sustained drops in pressure in patients accustomed to high diffusion rates through the coronary and renal vessels may be important, particularly with coronary narrowing. There are those who contend that this diminished blood supply is offset by the lessened demand on the cardiac muscle due to the lowered metabolic rate, diminished peripheral resistance, and relative avascularity of the operative field.¹

Old rheumatic valvulitis in the absence of failure may not cause difficulty, but careful evaluation is warranted here, particularly if mitral stenosis exists.

A good number of these patients give no previous history of rheumatic fever. Furthermore, the low-pitched diastolic rumble produced is frequently not heard by the unpracticed ear. The cardiac configuration and electrocardiogram may not be altered enough to be detected by the roentgenologist and electrocardiographer who frequently forewarn the surgeon in other lesions of importance. The hazards of aortic stenosis have already been suggested. Auricular fibrillation is prone to occur in old rheumatic hearts, and here one encounters the additional risks of reactivation of the inflammatory processes or the development of bacterial endocarditis, considerably lessened in this era of antibiotics.

Congenital cardiacs undergoing surgery for other conditions pose no insurmountable problems generally, as evidenced by the successes being obtained by direct attack on the lesions themselves. The prognosis with regard to the heart lesion should indicate whether certain procedures should be done.

Although syphilitic heart disease is rapidly disappearing from the American scene, there are still many cases with this affliction requiring surgery. Here, even, with aortic insufficiency in the absence of failure, there is no difficulty in the carefully handled case, for the ability of the powerful left ventricle to carry on is a marvel indeed. Aneurysms which do not produce significant pressure on adjacent organs are usually not bothersome, either. One must recognize, however, that coronary circulation is frequently impaired with aortitis (healed or active) due to coronary ostial involvement, and this may be present in the absence of aortic valvulitis or aneurysm.

To proceed further than evaluation, patients with decompensation should be adequately digitalized and excess fluid should be mobilized by salt-poor diets and diuretic agents if necessary. Delay may be advisable, if the surgical condition permits, in order to receive full benefit from these measures. Rehydration following prolonged diarrhea and vomiting should be undertaken with utmost caution, and emphasis should be devoted to specific electrolyte imbalance, rather than water loss alone. Sodium should be withheld unless clinical evaluation or blood analysis reveals hyponatremia. Oral fluids should be utilized when possible (and more often than not, it is). Transfusions with red blood cells, rather than whole blood, may suffice to correct preoperative anemia. Adequate pre-operative sedation, in safe doses allays tension and anxiety, and, of course, is important for smooth induction, which is a very important stage during anesthetization of the cardiac. Adequate oxygenation must be assured throughout the procedure by judicious choice of the anesthetic agent, an airway if necessary, and careful super-

vision of pulmonary function. Arrhythmias existing prior to surgery must be corrected, if possible or feasible (i.e., chronic fibrillators are probably best let alone). Arrhythmias occurring during anesthesia are more foreboding since they may indicate myocardial anoxemia and impending disaster; their etiology must be ascertained and normal sinus rhythm should be restored during surgery if possible.

It should be recognized that the cardiac at home frequently sleeps on two or three pillows. If pulmonary edema develops, he suddenly bolts upright, often remaining in this position, or walking the floor until he is able to breathe comfortably and then returning to bed. At surgery, however, the patient is usually completely flat and always strapped down. Frequently the blood volume is being increased rapidly by intravenous fluids. Then, under anesthesia, natural protective phenomena are lost. Therefore, where possible the head and chest should be elevated at least a little. The Trendelenberg position should be avoided and fluids kept to a minimum.

Use of Anesthesia with the Cardiac

Extreme care must be exercised to prevent tachycardia, overhydration, etc., in patients with mitral stenosis, or the hypertrophied right ventricle may literally “drown the patient.” It is not within the realm of the cardiologist to prescribe the anesthetic, particularly if an anesthesiologist is present. Even if the anesthetist is a technician, one should hesitate to advise an agent with which he is relatively unfamiliar. The patient is apt to fare much better

using the drug or drugs with which the technician is more skillful, for excessive bronchial secretions, atelectasis, anoxemia, and other hazards may be avoided. This is evidenced by the controversy about cyclopropane which many feel is contraindicated in the presence of myocardial disease. Others, however, use it in preference, pointing out that the dangers of myocardial irritability, blood pressure rise, and “cyclopropane shock” can be avoided.¹ It is universally recognized that a spinal is best avoided in the presence of severe arteriosclerosis, coronary insufficiency, and aortic stenosis because of the marked hypotension which may follow. Even here, the use of 100 per cent oxygen by inhalation and agents such as neosynephrine and methoxamine to counteract this may permit its use.

The advice to “be safe with a local” is most often fallacious. One only has to witness major abdominal surgery under regional anesthesia with the marked emotional tension, straining, and pain, to realize how much better and safer a good induction, and a nicely relaxing general anesthetic would have been for both hearts—the patient’s and surgeon’s. After all, the chief hazards to the cardiac undergoing surgery are offered by anoxemia, shock (due to bleeding or neurogenic factors) infection, etc. Any of these may overburden the straining heart and may mean the difference between success and failure.

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THEORETICAL and PRACTICAL APPLICATIONS of RADIOISOTOPES in CANCER

A critical evaluation of the current status of this widely publicized group of therapeutic agents.

ROBERT L. BROWN, M.D., Emory University, Georgia

WHEN RADIOACTIVE ISOTOPES FIRST BECAME available, speculation as to how these new agents might aid cancer diagnosis and treatment began at once and has continued up to the present time. Although many different theoretical applications have been suggested there are five of principal importance. These are (1) that there might be a specific selective action of radioactive isotopes on the cancer cell or on something in the body essential to the growth of malignant cells; in other words, that they might discover and destroy cancer; (2) that radioisotopes might furnish a more abundant and less expensive source of radiation which could be used as a substitute for x-ray or radium; (3) that some of the radioisotopes might prove to be qualitatively better than any radiation agent previously employed; that is, that they would have a more destructive effect on the cancer cell and do less damage to the normal tissue; (4) that the radioisotopes might make possible new media in which radioactive substances could be used; (5) that the radioisotopes might facilitate new methods for the diagnosis of cancer. Some of these theoretical applications have proved to be sound and practical. Others have not.

Radioactive Iodine

To date the search for a substance or chemical compound essential to cancer cells and not to normal tissue, which could be made radioactive and thus bring destructive radiation directly within the cancer cell, has not been successful. A partial realization of this objective has been achieved by the utilization of radioactive iodine which localizes in thyroid tissue. Since some cancers of the thyroid retain the ability of normal tissue to pick up radioactive iodine it has been possible to introduce a source of radiation directly within some thyroid cancer cells and to inhibit or destroy them. The cancers of the thyroid which have this capacity to absorb radioactive iodine,

also known as I-131, are those which bear the closest resemblance microscopically to normal tissue, but not all of these histologically well-differentiated tumors pick up I-131. Even in the approximately 15 per cent of thyroid cancers which do take up radioactive iodine, the treatment has not proved to be of curative value. Careful study of radioautographs, which are the pictures made on photographic film by the radiation from thin slices of thyroid cancer tissue, reveal the fact that the pick up of radioactive iodine is not uniform throughout the thyroid cancer. The result is that this spotty pick up leaves areas of viable cancer untouched. These areas are often greater in diameter than the range of the beta rays from radioactive iodine. Hence, even though adjacent cells might pick up I-131, there would not be enough radiation from this source to destroy the intervening islands of cancer. This is the principal reason why I-131 has not proved to be a curative agent in this disease. Surgery is the treatment of choice for cancer of the thyroid but when cancer of the thyroid is inoperable or when distant metastases are present, treatment by radioactive iodine may have considerable palliative value and we have had patients who have unquestionably been greatly benefited by it.

Radioactive iodine gives off two types of radiation: beta rays which have a very limited penetration and travel only about two millimeters in tissue and gamma rays which have a much longer range and can be readily picked up by a Geiger counter or scintillation counter at several feet from the patient. Not enough gamma radiation is absorbed within the tissues to be of significant therapeutic value and most of the effect of radioactive iodine comes from its beta radiation. Radioactive iodine has a half-life of eight days. This means that half of its energy is expended in eight days and that half of the remaining energy will be expended within the succeeding

eight days and so on. Consequently it does not remain within the body for any prolonged period of time. Furthermore a large part of it is excreted in the urine within three days. Radioactive iodine is available in liquid form, it is colorless and tasteless and is administered to patients by mouth after being diluted with water. Patients who are to receive radioactive iodine should not have received any other iodine preparation for four to six weeks previous to administration of the I-131, because other sources of iodine may saturate the thyroid cells and interfere with their subsequent pick up of the radioactive form of iodine. Iodinated dyes such as are used for pyelograms and gallbladder series may block thyroid pick up for periods as long as six months and thus make treatment with this agent ineffective.

Normal thyroid cells have a greater avidity for I-131 than have thyroid cancer cells. Because of this it is necessary to either remove the thyroid gland surgically or destroy its function by the use of radioactive iodine before a reliable determination of the ability of the thyroid cancer to pick up the radioactive iodine can be made. If the thyroid tissue is to be destroyed by I-131, the usual dose is 50 to 100 millicuries. Reaction to I-131 is usually slight; but there may be pain and tenderness in the thyroid region as a result of the radiation effect, and in rare instances edema in the region of the thyroid has developed. This may cause difficulty if the airway is already markedly narrowed by the thyroid cancer. Approximately two weeks after the dose given to ablate the normal thyroid activity and with the purpose of securing maximum pickup in the thyroid cancer, the patient is started on an anti-thyroid drug such as propylthiouracil or tapazole and this is continued for approximately six weeks and is stopped 72 hours before a tracer dose of I-131 is given. 24 hours before the tracer dose thyroid stimulating hormone, a total of 10 units divided into three doses eight hours apart, is administered. The patient is then given a tracer dose of 100 microcuries of radioactive iodine. The purpose of this is to determine whether or not the thyroid cancer in the inoperable or metastatic areas will pick up the I-131. The metastatic areas are checked with a counter at 24 hours and again at 72 hours and the output of radioactive iodine in the urine is also determined since from this one can calculate the amount which remains in the body. If there is evidence of uptake in the thyroid cancer, the TSH is reported and a therapeutic dose of radioactive iodine, usually 100 to 150 millicuries, is given in an attempt to bring about definite damage to the malignant tissue. Once again excretion studies are carried out as are measurements with the counter over the areas of involvement so that the approximate pick-

up of the radioactive iodine by cancer tissue can be determined. The therapeutic effect of the treatment may be delayed for as long as four or six weeks and re-treatment is seldom considered earlier than three months following the initial therapeutic dose.

If the individual dose does not exceed 150 millicuries the likelihood of damage to the bone marrow, liver, spleen or other organs is slight. There may be a temporary depression of the lymphocyte count, and if this does occur, further radioactive iodine should not be given until the count returns to normal. If radioactive iodine proves to be beneficial, it can be repeated at intervals of three months or more as symptoms may require. We have had patients who have been helped over a period of several years by the use of this agent as have others who have used it.

Precautions in Use of I-131

Precautions that need to be taken in the use of radioactive iodine in addition to keeping the total dose within a range which is safe for the patient have to do with the protection of other people who may come in contact with the patient or with the excreted I-131 while it is still radioactive. The amount of gamma radiation coming from the patient is carefully measured with a Geiger counter, and a placard is placed on the door of the patient's room indicating the safe distance, that is, the distance from the patient at which a person may stay for specified periods of time. Since radioactive iodine is eliminated from the body through the urine, the urine is checked for radioactivity. It is collected in large bottles by the patient and then stored in a shielded area until its radioactivity has fallen to 0.5 millicuries per gallon when it can be emptied into the sewage system provided the total so emptied does not exceed 10 to 25 millicuries per week depending upon the rate of flow in the sewage system. There are also other approved methods designed to keep

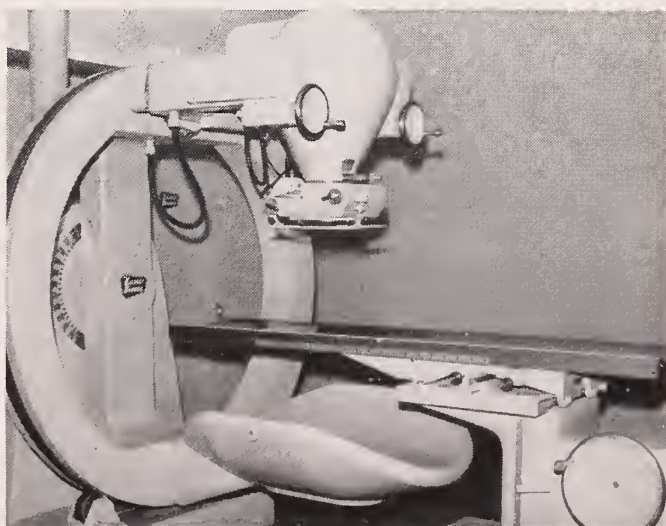


Figure 1: Radioactive cobalt therapy unit.

the radioactivity of the sewage effluent at a safe level.

Radioactive Cobalt

The next theoretical application of radioisotopes concerns the possibility of more abundant and/or a less expensive source of radiation. This objective has in large measure been realized principally through the isotope cobalt 60 which is also known as radioactive cobalt. This isotope emits gamma rays which are roughly comparable to those from radium and which are also comparable to the rays which come from a three million volt x-ray machine. Although cobalt 60 emits some beta rays these are removed from the beam by suitable filters and are not used therapeutically. Since radioactive cobalt is available in much larger amounts than is radium and at a cost considerably less, it can be placed in treatment units and a beam of gamma rays used for treating patients. A cobalt 60 therapy unit costs from \$18,000 to \$75,000 depending upon the size and complexity of the apparatus whereas a two million volt x-ray machine costs about \$125,000. Radioactive cobalt costs approximately \$11.00 per curie whereas radium costs about \$21,000 for a comparable amount. It is obvious that real progress has been made in this area and that a new and less expensive source of radiation has been made available. Radioactive cobalt is also available in far larger amounts than is radium. Work is now being carried out on radioactive cesium which emits radiation which is roughly comparable to that coming from a 600,000 volt x-ray unit, and it is possible that cesium may be of considerable practical value in the future. It has a half-life of 37 years whereas radioactive cobalt has a half-life of only 5.3 years and requires more frequent recalibration for accurate dosage determination.

Advantages of Radioactive Cobalt

The chief advantage of radioactive cobalt when compared to the standard 200 or 250 kv x-ray therapy lies in the fact that it is possible with cobalt 60 to deliver a larger dose of radiation to a deeply seated tumor with less reaction in the overlying skin. The skin reaction in the use of conventional x-ray has often been a limiting factor. With cobalt 60 the limiting factor is the tolerance of the normal tissue adjacent to the tumor. Since the beam is harder and more penetrating there is less back scatter which means less secondary radiation set up in the tissues through which the beam travels and probably related to this is the fact that there is less radiation sickness. For superficial lesions standard x-ray equipment may be better than cobalt 60, but for deep lesions radioactive cobalt seems to be

superior for the reasons given. There is a definite limit to the dosage which can be administered however, and the intestinal mucosa and other normal tissues will not tolerate with safety more than 5,000 to 6,000 gamma roentgens. The use of a cobalt 60 unit creates new problems in that it requires much heavier shielding than does the conventional x-ray therapy and this often means the construction of a new heavily shielded room to house the unit or extensive alterations in existing space. In addition to cobalt beam therapy, cobalt 60 has been found useful in interstitial and intracavitary treatment as a substitute for radium.

In regard to the hope that the radiation from radioactive isotopes might be qualitatively better than any form of radiation previously available, it is now apparent that this objective will probably



Figure 2: Measurement of radioiodine uptake with count rate meter.

not be realized. It is the amount of ionization produced within the cell which seems to be the key to the radiation effect and this is controlled by the amount of radiation reaching the cell whether it comes from conventional x-ray, cobalt 60, superficial x-ray, radium, radioactive gold, radioactive iodine, or any other source of radiation. The actual qualitative cancericidal effect of the newer agents does not seem to be greater. Their advantage lies in the fact that their use sometimes makes possible the introduction of more radiation into the tumor area.

Liquid Forms of Radioactive Agents

The fourth theoretical application which deals with the development of new methods of radiation therapy has turned out to be quite successful. It is now possible to administer radioactive agents in liquid form whereas formerly radiation had to be either in a beam as from x-ray or through the use of radium applicators on the skin or needles or seeds

within the tissue. Now radioactive iodine can be given by mouth; radioactive phosphorous can be given either by mouth or intravenously; radioactive gold can be given within the pleural or peritoneal cavities, injected into tumor-bearing areas, or given intravenously. Fine nylon tubing containing small pellets of radioactive cobalt, gold, or iridium can be literally sewn into cancer tissue and a more homogeneous dose of interstitial radiation thereby produced.

Radioactive Phosphorus

Radioactive phosphorus was one of the first isotopes produced for therapeutic use. It has a half-life of 14.3 days and the radiation which it emits is entirely beta which is radiation which penetrates only a few millimeters in tissue. The bone marrow takes up an appreciable amount of P-32,



Figure 3: Patient taking tracer dose of radioactive iodine.

but this pick up is far from selective because it is actually a little less than the pick up of an equal amount of liver tissue and only twice as great as an equal amount of muscle. It is probable that the whole body radiation together with the bone marrow radiation and the intracellular uptake contributes to the beneficial effect of P-32 in polycythemia and chronic leukemia. P-32 is generally recognized as the treatment of choice for polycythemia, but there is divided opinion as to whether or not it is to be preferred to x-ray and chemotherapy in the treatment of chronic leukemia. It is not effective in acute leukemia. It has been tried in the lymphomas but found to be of little value. P-32 has also been used in the treatment of metastatic cancer in bone, but it has not proved to be consistently of value and does not seem to hold much promise in this area. Potential hazards from treatment with P-32 are the production of hypoplasia of the erythrocytic, granulocytic, or thrombocytic series, or some combina-

tion of these.

Radioactive Gold

Radioactive gold is one of our most useful radioisotopes. It is available as a colloidal liquid for injection and also as gold seeds for interstitial therapy. It has a half-life of 2.7 days and emits radiation which is approximately 90 per cent beta and 10 per cent gamma. This means that most of the energy which comes from it penetrates tissue for only one or two millimeters, and therefore surrounding normal structures are not excessively irradiated. When radioactive gold is placed in the pleural or peritoneal cavities, it is in direct contact with the pleura or peritoneum, and radiation from it is sufficient to reduce or prevent pleural effusion and ascites in about 50 per cent of the patients with metastatic cancer in whom the gold is used. It is not effective in the treatment of pleural effusions and ascites due to other causes. Radioactive gold is shipped via air express in a shielded container and can be administered diluted with normal sterile saline through a small polyethylene tube placed in the pleural or peritoneal cavity. It tends to remain localized in these areas and very little reaches other parts of the body. The usual dose for control of pleural effusion is 50 to 75 millicuries and the usual dose for control of ascites, 100 to 150 millicuries. Change of position every 15 minutes for several hours helps to assure good distribution. In addition to its use for control of effusions, radioactive gold has been used, primarily by Dr. Reuben Flocks, with encouraging palliative results, for the treatment of cancer of the prostate by direct injection into the area involved by the cancer. Hahn and others have injected radioactive gold into other types of cancer with varying success but it has not been put into general use in this way. An investigative study by Dr. Willard Allen and associates at the George Washington University in St. Louis has been concerned with its use as an adjunct in the treatment of cancer of the cervix. The gold in this instance is injected into the parametrial regions where it has some direct effect, and it is also apparent that some of it is picked up by the lymphatics and localized in the regional lymph nodes. It should be emphasized that this method of treatment is still under evaluation and is not in wide general use as yet. Radioactive gold has also been used prophylactically after removal of ovarian tumors in an effort to destroy floating cells or microscopic metastases. Hahn, Sheppard, and others have used it intravenously and report it to be comparable to P-32 in the treatment of chronic leukemia. Radioactive gold is not excreted in significant amounts and the patient's urine does not require special handling. Precautions do need to be taken, however, because

of the gamma radiation from the radioactive gold which constitutes a potential hazard to medical personnel and other individuals who may come in close contact with the patient. The amount of gamma radiation coming from the patient is carefully measured after the gold is instilled and a warning placard placed on the patient's door to indicate the safe distance to visitors and hospital personnel just as in the case of radioactive iodine. The short half-life of the radioactive gold results in rapid diminution of this hazard so that within a few days it is of little consequence.

Other Applications of Radioisotopes

There have been numerous efforts to use radioisotopes for diagnosis based on the theory that rapidly growing tissue will accumulate more carbon, nitrogen, oxygen, sodium, phosphorus, sulfur, potassium, calcium, iron, and other tissue constituents than adjacent normal tissue. The difficulty lies in the fact that the incorporation of radioactive atoms into the newly formed tissue is always accompanied by their incorporation into other tissue as well. The differential between the uptake in the tumor and in adjacent normal tissue may not be great enough to be of diagnostic significance or it may be inconsistent and therefore not of consistent value. Radioactive phosphorus, radioactive diiodofluoresceine, and radioactive iodinated human serum albumin have been used by some investigators but have not as yet been proved helpful or reliable enough for general use.

Investigators are constantly looking for new applications for radioactive isotopes and attempting to improve the effectiveness of those already in use. Radioactive chromic phosphate has been used as an alternative to radioactive gold in and for injection into prostatic cancer. Radioactive iridium seems to be a promising source of interstitial radiation. Radioactive cobalt and radioactive gold have been used within the bladder for treatment of bladder carcinoma

as has radioactive tantalum wire.

Controls on Use of Radioisotopes

Whether you will use radioactive isotopes in your practice in the treatment of cancer depends upon your experience with these agents and upon your affiliation with medical schools and hospitals which have radioactive isotope laboratories. The Atomic Energy Commission at Oak Ridge has laid down stringent controls on the therapeutic use of radioactive isotopes in order to protect the public and also to protect uninformed doctors. At the present time radioactive isotopes for therapeutic use can be obtained by approved radioisotope laboratories and used under the direction of the personnel of such institutions or laboratories providing that the use of a particular isotope for a particular purpose has been approved. Since there are approximately 1,300 institutions and hospitals in the country which are now using radioactive isotopes for medical purposes, it is apparent that they either are or soon will be available to all patients who may really need them.

Although initial hopes have not been completely realized, radioactive isotopes have proved their usefulness and have added to our therapeutic armamentarium against cancer. There is no question but that they are here to stay and that new applications for radioactive isotopes in cancer therapy can be expected in the future.

P. O. Box 459

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STATEMENT RELATIVE TO V.A. HOSPITALS

VETERANS ADMINISTRATOR HARVEY V. HIGLEY at a hearing of the House Committee on Veterans' Affairs stated: "If you have an extra bed you are not using, and if you have a veteran, non-service connected, who needs hospitalization, and he cannot afford to pay for that hospitalization, then we are automatically to take him in. But it is predicated entirely, you will note, on IF WE HAVE EXTRA BEDS. . . . Now we find ourselves today in the situation of operating about 100,000 patients in our own hospitals, and on any given day

over a third of them are service connected and two-thirds of them are non-service connected. So, just putting it bluntly, that is the situation. If you add on any appreciable number of beds, either as a big addition or as a big hospital YOU ARE BUILDING BEDS FOR NON-SERVICE CONNECTED, whereas the law as it exists today actually says you will only take in non-service connected when you have EXTRA beds, when they are beds you do not need for the service-connected."

ALCOHOLISM and ATTITUDE THERAPY

VERNELLE FOX, M.D., Atlanta, Georgia

THERE IS A GREAT DEAL of confusion about the subject of alcoholism, ranging from "this is an illness" to "it's a moral issue." Most of us have come to accept alcoholism as a health problem, not a moral or legal issue, but with very little understanding of what it is. I like to think of it essentially as a disease. Most of us accept the fact that any human being who is grossly uncomfortable, who is not functioning in a homeostatic manner, is sick and is not manifesting willful misbehavior. It is logical that people prefer to be comfortable.

We are probably at about the point of understanding with alcoholism that we were with "consumption" a hundred years ago. It's a catch-all, a wastebasket of lumped together syndromes. The one common symptom is the addiction to alcohol to the extent of interfering with normal function and for the purpose of relieving anxiety. It is important to recognize that this is a complex, slowly developing process. When we look back over the history of these individuals, it is apparent that alcoholism starts as a symptom of an underlying emotional disturbance and that it ultimately becomes the cause of a rather profound mental and physical disability. It may be the manifestation of any psychiatric derangement. I have seen alcoholism secondary to mental deficiency, anxiety neuroses of all descriptions, latent manic depressive psychosis, and overt schizophrenia. I recall one boy whose drinking was invariably set off by his auditory hallucinations. Alcohol would enable him to live in the outside world with his schizophrenia. There is really no typical personality pattern. The baffling group is the one that manifests no overt psychiatric condition. To all intents and purposes, these are people who are "so normal if he just didn't drink." They have an amazing ability to maintain themselves, and their neurosis is manifested entirely by their alcoholism. This is by far the largest group and it certainly is the most salvageable. This is the type patient most frequently seen by and in the medical profession. We all know one or two, either your favorite electrician, the vice-president of the real estate company, or someone

similar. They're charming people, usually gracious, and very anxious to please—for several months at a time. Then for no obvious external reason, they are on a one to four weeks drunk, upsetting everyone around them and destroying much that they have established during the last few months. When they become sober, they become remorseful, apologetic and conscientious. They rapidly rebuild their previous acceptable position only to destroy it again.

Quite obviously, underneath the surface is an unending battle between basic or ontological anxiety and the anxiety secondary to alcohol. Essentially, these people have as their fundamental problem low ego strength and a very low sense of personal worth. In spite of external appearances, they do not consider themselves worthy of normal existence. They have never really felt totally accepted. They do not know what it is to actually feel loved. Even though love and acceptance may be manifested all around a person, he has to consider himself worthy of being loved to feel it. I will not go into the controversy of whether this basic mechanism is a congenital or an acquired difficulty. I will leave that to the psychiatrists. This is of relatively little importance when we realize that the individual functions on this level at the time we see him as an adult alcoholic and that he has a potential for developing a sense of personal worth and a tolerance for his anxiety. Developing these potentials is the basis of therapy.

What does having an inadequate sense of personal worth do to an individual? It makes him overly-demanding, first of himself and then of those around him. He consistently needs to feel that he is perfect to over-compensate for his feeling of inadequacy. He tries very hard to buy love and approval, but since he is expecting more than is needed to satisfy the demands for love and approval of the average person, he is constantly frustrated. He always feels a sense of failure and never really acquires the thing he is looking for because of his inability to receive it. Symptoms of this feeling of inadequacy may be manifested at any point in the individual's life. Like other processes, such as low

or high basal metabolism, insulin formation capacity, etc., these symptoms come in all degrees, from extremely mild to extremely severe, and may appear at any time, depending upon the stress on the individual. I have seen patients manifest this difficulty in early childhood but it is more commonly seen in middle life. As a rule, the more severe the disability, the earlier the symptoms are seen:

Sooner or later, most of us are exposed to alcohol. Alcoholics learn rapidly that alcohol eases their discomfort and takes away the pain of feeling basically worthless. Their conscious motivation to take a drink is not essentially different from yours and mine. Theoretically, they intend to relax, to cease worrying about inter-personal relations and to be able to relate to the people around them more comfortably. Unfortunately, it doesn't come out that way. What is sedated is conscious control and awareness. When these controls are partially anaesthetized, the buried tensions, hostilities, and frustrations are released. The alcoholic will do and say, when drinking, things that are totally unacceptable to him, things he would never allow himself to do or say without alcohol, because it is so contrary to his needs to please and to buy attention. This action on his part serves to further lower his self-esteem, and he realizes he's out of control which sets up an immediate need for rationalization and denial of the difficulty.

Rationalization and denial are the major blocks to seeking help. Rationalization is not on a conscious level. It is not just "orneryness"; it is a very profound necessity. An alcoholic simply must believe that he is too nice a person to behave like that, that it's somebody else's fault, that if she didn't and he hadn't, then he wouldn't. Anything else is too threatening to his self-concept. Sometimes the struggle in which he is engaged is almost visible. He feels inferior and inadequate; then he sees himself manifest inadequate and inferior behavior. This serves at one time to prove that he was right about himself and at the same time to be so threatening that he cannot look at it. This leads to a real squirrel cage, a vicious cycle of drinking, remorse, regret, misunderstanding, lack of acceptance, and criticism by the people around him, which further strengthens his sense of being misunderstood and rejected and thereby establishes a greater need for drinking. This is a steady downhill course that Dr. Jellenick calls "drinking because of the drinking." It is alcoholism. Unless the cycle is broken the ultimate development is death or insanity.

How can this cycle be broken? We all realize that the first essential step is motivation toward sobriety on the part of the patient. Until that point

is reached, very little can be done. As long as the ontological anxiety outweighs the anxiety secondary to the alcoholism the motivation or push is towards drinking. After all, very few of us move in any direction except from discomfort to anticipated comfort. Nature and society contribute consistently to increasing the anxiety secondary to the alcoholism. The pain and discomfort of the hangover, the rejection of behavior while drinking, the loss of economy: these factors make the drinking progressively more painful. Where the medical profession can best serve its patients is on the other end of the see-saw, trying to decrease the basic anxiety.

We have a number of tools in our hands for this job. First, of course, is good medical care. An individual who is physically ill is certainly physically weaker than one who is physically well. This involves all the techniques and procedures which we have learned in school and afterwards. An even stronger medicine in your armamentarium is acceptance—your own personal attitude toward this group of individuals and your understanding of why they function as they do. If you and I, whom they often symbolize as all-knowing, omnipotent, father substitutes, cannot understand and accept them, how can they accept themselves? If we can add hope and a belief in the fact that they can get well, to our therapy, it will further decrease the basic anxiety. Education and supportive therapy are tools that are useful, also. Insight into the exact nature of their disability is very important, and we can contribute to this.

This attitude should not be just a completely pampering and tolerant one that would not be healthy, because the first essential in a therapeutic attitude toward the alcoholic is to set specific limits. These limits are: 1. The patient must be motivated to stop drinking and much do as much as is possible to tolerate his anxiety without resorting to alcohol. 2. He must, as rapidly as he can, begin to let go of this detail and rationalization. With this, be consistent. If you truly understand and accept his illness, to both of you this will be a manifestation of understanding and interest, not of criticism and control. These are practical ways to show him that you actually have a great deal of faith in his ability to function on a normal level; that you believe he can tolerate his anxieties without recourse to alcohol; that you actually think more of him than he thinks of himself. By this, he can borrow your faith. By this, he can begin to grow because he feels that he is capable of growing. After all, the all-knowing doctor has manifest many symbols of his knowledge of the fact that he can grow. The doctor is offering understanding and acceptance but on a strictly "do-it-yourself" basis. He is taking him as he is, accepting him, and

maintaining that he is capable of changing. He should offer no advice or condemnation or control but a simple consistent belief that he is perfectly capable, in time, of becoming a comfortable, productive, mentally healthy individual, if he refrains from taking the first drink.

He will test this in many ways. He will attempt to put excessive demands on you. First, to satisfy his needs for your approval and attention but more fundamentally to check to see if you really believe that he is capable of managing his own life. One of the most difficult things in working with alcoholics is your own frustration because of your own need to do something for somebody. You expect action and results from yourself. When you're caught by this you start telling him how to manage his life. He realizes that you didn't actually think he was capable of doing it himself, and you've lost your greatest therapeutic tool for helping him mature. It has been correctly said that an alcoholic immedi-

ately knows whether you've been hoping with him or coping with him. Another problem is the time factor. We are accustomed to seeing the results of our efforts rapidly. Your efforts in working with an alcoholic may show no obvious results for months or years, but all satisfactory interpersonal encounters are growth processes and benefit the individual.

This far from covers the entire problem of alcoholism. It is so complex that one could not begin to go into much of it but these are a pair of fundamental facts that are very useful. Very few of us are in a position to avoid dealing with alcoholism. Basically, it should be remembered that the major difficulty these people have is their lack of faith in themselves and the fact that they're capable of living well-adjusted, happy, comfortable lives. They have a great need to realize and deny their problem. Accepting their problem as a problem and not as the manifestation of worthlessness, is attitude therapy.

1260 Briarcliff Rd.

GEORGIA STATE BOARD OF PHARMACY RULING

Returning Unused Portions of Prescriptions

A Resolution pursuant to Code Section 84-1309 of and by the Georgia State Board of Pharmacy regulating the acceptance of unused portions of drugs and prescriptions by any licensed pharmacist or drug store within the State of Georgia and for other purposes incidental therewith.

"Be it resolved by the Georgia State Board of Pharmacy in regular session assembled in Atlanta, Georgia, at the Chief Drug Inspector's office, 19 Hunter Street, S.W., Room 212-214 on November 20, 1957, as follows:

Section I. That from and after this date, it is hereby declared that it shall be unlawful for any licensed pharmacist or drug store operating within the State of Georgia to accept for refund purposes or otherwise any unused portion of any dispensed prescription.

Section II. The reason for the passage of the regulation set forth in Section I hereof being

due to the fact that in the interest of public health that such drugs in all likelihood have become contaminated with communicable diseases and/or contagious diseases under the holder thereof and would tend to create a health problem if placed in reuse or stock by any licensed pharmacist or drug store.

Section III. Any regulation or parts thereof in conflict with this regulation is hereby repealed.

Be it so resolved by the Georgia State Board of Pharmacy in regular session held on November 20, 1957."

*Homer J. Avera, Chairman
B. D. Davis, Jr., Member
C. L. Clifton, Member
E. W. Oatts, Member
B. H. Shackelford, Member
S. Lanier Hardman, Member*

BURNS

The author's personal experience in this area is reviewed, and an illustrative case is reported.

JOHN G. SHARPLEY, M.D., Savannah, Georgia

BURNS are complicated, neglected, mismanaged, and misunderstood. Many factors are unknown, and many times their severity is recognized too late and treated too little.

This is a tragic injury which one could discuss for many hours and not complete the subject, so these remarks will be confined to the highlights of burns, the fundamentals, and will not deal with the details.

First of all, when one sees a new burn, he has difficulty in determining the depth of the burns, and sometimes it takes days in order to recognize just how much depth or severity it has. First and second degree burns are characterized by a pink color, mottled, red, blister formations, weeping, and extreme pain. Third degree burns are usually pearly white, charred, dry, and anesthetic. In governing the area involved the Rule of Nines is used almost universally by surgeons.

Burns of 30 per cent and over are all very severe and should be treated with the utmost care.

Burns of 20 per cent and under are treated as minor burns, yet if neglected, these can still be disastrous.

The major steps in handling burns can be broken down into the following in accordance with their severity: (1) Shock, (2) Hemoconcentration, (3) Electrolyte imbalance, (4) Infection, and (5) Reconstruction. First, shock is handled by heavy sedation. Intravenous morphine is most effective in getting the patient comfortable and out of pain. No attempt should be made to debride burns until this is accomplished.

Hemoconcentration begins immediately, caused by a fluid shift into the so called third space. This is caused by loss of protein, loss of electrolytes, followed by rapid destruction of the red cells.

It has been noted that burns of 30 per cent or more have a hematocrit of 50 per cent in two hours and 70 per cent in five hours. This is by far the best criterion in handling this phase of injury.

Here the colloids, blood serum, and plasma, play

a big part. Dextran is used, but not frequently, as a supportive treatment. Ringers solution is well balanced and can be used very well with 10 per cent glucose in water, along with blood plasma and serum.

A good rule to go by in all 30 per cent burns and over, in accordance with the usual loss of electrolytes, etc., is to consider approximately 1,000 c.c. of colloids in the first twenty-four hours, with 3,000 c.c. of electrolytes and 2,000 c.c. of glucose in water, all in the first 24 hours.

The above totals 6,000 c.c. of fluids, one-half or 3,000 c.c. being given in the first eight hours, one-quarter or 1,500 c.c. in the second eight hours, and one-quarter in the third eight hours.

In the second twenty-four hours one-half to three quarters of the first day's treatment, plus water replacement, should be given.

Urinary output should average 30 to 50 c.c. per hour. After forty-eight hours reverse the amounts. Give approximately 135 mgs sodium, 80 to 120 mgs of potassium, and blood in large amounts. Maintain the hematocrit at 45 or above.

If urine drops below the normal rate, work fluids back and forth until flow is normal. Occasionally the urinary output will drop to around 200 c.c., and fluids must be forced, sometimes requiring enormous amounts up to 30,000 c.c. daily.

Severe burns usually destroy all the intravenous sites used. In this case, one must resort to the deep system such as the femoral, etc. If this be the case, utmost care should be used, as this is dangerous. Thrombosis, as well as infection, can be serious.

Ten to fourteen liters of fluids are not uncommon. Hemolysis continues in some patients over the usual time required for repair or stabilization. Children require much larger amounts of fluid than previously thought.

Infection comes later in the course but should be considered with the first debridement and guarded against throughout. Nearly all deaths in the latter

stages are caused by septicemia and some die from causes yet unknown.

Antibiotics, of course, should be used, but with great discrimination and definitely should not be used continuously. Let me repeat! No antibiotics should be used constantly, as it has been noted that many patients on continuous antibiotics have died with septicemia. One hospital in this country was closed because it was found to make continuous use of certain antibiotics. This caused other organisms to run rampant, therefore every operation and every wound became infected.

Another hospital made a rule that albamycin should not be used but kept for future use, should uncontrolled organisms gain a hand in the hospital.

Reconstruction of burns or the treatment of the burn surface is very important. When first looking at the surface burn it is difficult to tell how much grafting will be necessary or when. One must inspect and dress these wounds himself in order to determine the extent and time of grafting. Do not let the intern or nurse dress these wounds. You will not only run the risk of infection which so often occurs, but you will miss the most opportune time to graft these wounds. In nearly every burn the wounds will become infected, and healing delayed many weeks and sometimes months, if the time for grafting, which may come quickly, is overlooked.

Grafting is an easy art, best accomplished with the use of the electric dermatone set at 12/1000th of an inch. The graft is thin, takes quickly, is easy to handle and unites with ease, grows fast on a nice clean surface; and it is not unusual to have a take of 100 per cent. Extensive grafts are easily accomplished and may be done quickly. All the graft surface does not have to be done at one setting, and most often cannot be done because of the lack of donor skin. Alternate or leave a space between each graft and make each graft the same thickness.

There are many little maneuvers that will aid in using the dermatone. One, tighten the screws, holding the blade, and set it first to a zero reading. Then bring it up to the desired setting. Do not trust your help, as many deep cuts are made by a loose blade and a wrong setting. Keep the dermatone dry at all times. After the skin has been prepared, usually with alcohol, let it dry and then sprinkle powder

on the donor area, wiping off all excess. These procedures allow one to remove any desired depth and length required without skipping or slipping on the skin.

Now in conclusion I will present a patient and his case history.

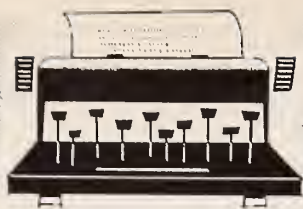
Case History

Mr. H. K. H., white, age 27, was admitted to the Central of Georgia Railway Company Hospital on November 29, 1954, with severe third degree burns of both upper arms, face, scalp, neck, entire back, buttocks, and right calf, the result of an inflammable tank explosion. He was immediately given heavy sedation and intravenous fluids were started. He was kept warm with blankets, and no attempt was made to treat the burns. General condition was fairly good. When patient was out of shock his wounds were debrided carefully and made as near aseptic as possible with sterile linen, dressings, etc. These pressure dressings were not changed for four days. This was done because the patient complained bitterly of the tightness of the dressings, particularly on the arms. The patient had not been able to retain any fluids up to this time. Intake and output records were beginning to balance. Urine however showed an increasing amount of albumin, casts, etc. N.P.N. 40 mgs; Chlorides 455 mgs; Blood sugar 98 mgs; R.B. C. 5, 530,000; W.B.C. 23,000; Hbg: 110 per cent. Polys 66 per cent and with 22 per cent stabs. All of this showed that fluids were lacking and the shift to the third space was still present. Balance was maintained at this point and held throughout except for the hemolysis soon to follow which was corrected with large amounts of blood. With the patient then stable our entire attention was placed on reconstruction which consisted of nine grafts, starting with the face and working downward. Four of these grafts were extensive ones, extending from the neck or shoulders to the buttocks in long sheets of skin measuring 12,-000 of an inch. These grafts were so placed as to leave a space between each sheet as the donor site would be allowed to heal before more skin could be used. In this case it was necessary to use the same sites twice with very good percentage of takes on the second removal. With continuous grafts the entire raw surfaces were gradually covered. The patient was discharged from the hospital on April 12, 1955, approximately four and one-half months later.

24 E. Liberty Street

NOTICE TO READERS

THE JOURNAL WISHES to extend an apology for the omission of DR. IRENE F. LAMOTTE's name from the article "Radioactive Iodine in Treatment of Pulmonary Insufficiency" which appeared in the November 1957 issue of the JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA, page 499. Dr. LaMotte, Augusta, was coauthor of the article along with Dr. B. Shannon Gallaher.



editorials

GEORGIA BLOOD BANKS, A VITAL MEDICAL MOVEMENT

BLOOD FOR TRANSFUSION, together with the preparation and utilization of blood derivatives, has become an important subject of vital interest to all concerned with the broad field of "health." Concerned with this aspect of the "healing art" we find many people of diverse vocations who meet and work toward the objective of providing blood or its derivatives to the sick when needed.

It is immediately obvious that the final step of administering blood represents the result of work by a great many people. We are sometimes prone to forget that these events did not happen by chance. In fact, precisely planned action was necessary to obtain the donors, evaluate their general and hematologic status, draw the blood, type it, and do the necessary crossmatch procedures. Concerned with one or more of these various facets, also, are hospital administrators, state or municipal health facilities, welfare agencies, and the physicians managing the patient.

The tremendous increase in the use of blood has resulted in much new information. While this has made the use of blood a much safer procedure, the complex technical problems have led to the development of an entirely new scientific field. Changes in our way of life related to this problem include travel, which is frequent and often relatively distant, and the development of medical centers. In both these situations blood is required at a point at which donation by relatives is impractical or impossible.

It has occurred to many in the state that an organization devoted to the subjects of blood and blood banking could contribute significantly in working out problems in the many allied fields. It is proposed that this be done through a program covering the following areas:

1. *Procurement of Blood:* A satisfactory supply of blood has been a larger and larger problem each year. This has been particularly evident in areas where procurement was related to

the war and defense needs of the country.

2. *Scientific Information:* As indicated above, new information appears almost daily. Acquiring and applying this information in our everyday work is a problem in itself, particularly in those areas removed from the medical centers. Dissemination of this information through scientific programs and its application in "workshop" demonstrations would result in elevation of standards throughout the state.
3. *Clearing House Program:* This organization, through membership in the American Association of Blood Banks and the Southeast District Clearing House, would be able to transfer blood credits to any part of the country as needed by residents of the state or their relatives. In other words, the blood could be donated at some member bank in Georgia and credit transferred to the facility in which the dependent or relative is hospitalized. The same process in reverse would supply blood to non-residents when the need arises during their temporary location in Georgia. The same system of credits and debits could be used to much benefit in connection with inter-state travel.

The Georgia Association of Blood Banks was incorporated in the State of Georgia in April, 1957. The objectives outlined can be accomplished through the cooperative interest and effort of all concerned with a blood program in any capacity. The support of all is earnestly solicited through application for Institutional or Individual Membership. With such support the program described can be inaugurated promptly. The first meeting will be held on February 22, 1958, in Atlanta, Georgia. The tentative program includes discussions by nationally recognized authorities in the various facets of blood banking and workshops covering theory and practical application of the newest technical advances.

H. V. Hastings, M.D.
Augusta, Georgia

MEDICO-LEGAL COOPERATION

IT IS A PRIMITIVE and natural instinct to protect ourselves from aggression by others. When a man is pushed he pushes back and usually a fight results. This is a natural reaction but not always a mature one. For a long time some doctors and some lawyers have been acting like immature children. Instead of cooperating willingly with each other for the good of their mutual patient and client, for the good of the public, and for the good of the two professions, their

relationship has been characterized by antagonism, resentment, and a lack of cooperation.

Some lawyers call or subpoena doctors with no regard for obligations to other patients or for the doctor's time and convenience. In some instances the doctor, having been used as a witness, was dumped without regard for unpaid compensation for past or recent services to the patient-client.

Other lawyers, with the doctor on the stand, rather than using ethical means to prove or to disprove the latter's competence in the field of medicine in which he was called to testify, asked questions which held no relevance to the case involved and which no doctor could answer unless specially and recently trained in the field of medicine to which the questions referred.

On the other hand some doctors did not take into consideration that they alone had technical information concerning their patient's accident or illness and apparently had no recognition of their responsibility to assist in obtaining justice for their patients. They resented any intrusion on their time by the lawyers and by the courts. These doctors, instead of cooperating with their patients, with the lawyer, and with the court, fussed, fumed and procrastinated.

The Georgia Bar Association and the Medical Association of Georgia realized that the above attitudes and reactions on the part of the lawyer and of the doctor were childish, immature, and unethical. They realized, also, that the lawyer and the doctor had a mutual responsibility to cooperate to obtain justice for their client-patients. Therefore, the two organizations have appointed committees to draft a code of cooperation to guide lawyers and doctors in procedures involving the two professions. If the code is followed, the dignity of the individual lawyer and doctor and the integrity of the two professions will be retained. Also, the work of courts and the obtaining of justice for individuals and the public will be facilitated. As soon as the code has been adopted by the two organizations, a copy will be sent to every member of the Medical Association of Georgia. Study it carefully. We doctors are obligated to follow the principles expressed therein and to achieve the objectives for which the code was written.

AMA HOUSE OF DELEGATES REPORTS ACTIVITIES

FLUORIDATION OF PUBLIC WATER supplies, free choice of physician, the Heller Report on organization of the American Medical Association, the Forand Bill providing hospital and surgical benefits for Social Security beneficiaries, guides for occupational health programs covering hospital employees, distribution of Asian Influenza vaccine, and guides

for the medical rating of physical impairment were among the variety of subjects acted upon by the House of Delegates at the American Medical Association's Eleventh Clinical Meeting held Dec. 3-6 in Philadelphia.

Dr. Cecil W. Clark of Cameron, Louisiana, was named 1957 General Practitioner of the Year after his selection by a special committee of the Board of Trustees for outstanding community service. Dr. Clark, 33-year-old country doctor who was a medical hero during Hurricane Audrey last June, was present at the meeting to receive the gold medal which goes with the annual award.

Fluoridation of Water

In settling the most controversial issue at the Philadelphia meeting, the House of Delegates approved a joint report of the Council on Drugs and the Council on Foods and Nutrition which endorsed the fluoridation of public water supplies as a safe and practical method of reducing the incidence of dental caries during childhood. The report on the study which was directed by the House at the Seattle Clinical Meeting one year ago contained these conclusions:

"1. Fluoridation of public water supplies so as to provide the approximate equivalent of one ppm of fluorine in drinking water has been established as a method of reducing dental caries in children up to 10 years of age. In localities with warm climates, or where for other reasons the ingestion of water or other sources of considerable fluorine content is high, a lower concentration of fluoride is advisable. On the basis of the available evidence, it appears that this method decreases the incidence of caries during childhood. The evidence from Colorado Springs indicates as well a reduction in the rate of dental caries up to at least 44 years of age.

"2. No evidence has been found since the 1951 statement by the Councils to prove that continuous ingestion of water containing the equivalent of approximately one ppm of fluorine for long periods by large segments of the population is harmful to the general health. Mottling of the tooth enamel (dental fluorosis) associated with this level of fluoridation is minimal. The importance of this mottling is outweighed by the caries-inhibiting effect of the fluoride.

"3. Fluoridation of public water supplies should be regarded as a prophylactic measure for reducing tooth decay at the community level and is applicable where the water supply contains less than the equivalent of one ppm of fluorine."

Free Choice of Physician

Acting on the issue of free choice in relation to contract practice, the House passed a resolution which reaffirmed approval of previous interpretations of the Principles of Medical Ethics by the Asso-



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1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.

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NEW DOSAGE. The recommended adult dose is 1 Gm. (2 tablets or 4 teaspoonfuls of syrup) the first day, followed by 0.5 Gm. (1 tablet or 2 teaspoonfuls of syrup) every day thereafter, or 1 Gm. every other day for mild to moderate infections. In severe infections where prompt, high blood levels are indicated, the initial dose should be 2 Gm. followed by 0.5 Gm. every 24 hours. Dosage in children, according to weight; i.e., a 40 lb. child should receive $\frac{1}{4}$ of the adult dosage. It is recommended that these dosages not be exceeded.

TABLETS: Each tablet contains 0.5 Gm. ($7\frac{1}{2}$ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

SYRUP: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxypyridazine. Bottle of 4 fl. oz.

EDITORIALS / Continued

ciation's Judicial Council and directed that they be called to the attention of all constituent associations and component societies. One Council opinion stated that the contract practice of medicine would be determined to be unethical if "a reasonable degree of free choice of physician is denied those cared for in a community where other competent physicians are readily available." The resolution also cited a Council opinion which stated that the basic ethical concepts in both the 1955 and 1957 editions of the Principles of Medical Ethics are identical in spite of changes in format and wording. This opinion added that "no opinion or report of the Council interpreting these basic principles which were in effect at the time of the revision has been rescinded by the adoption of the 1957 principles."

The 1927 Council report also pointed out that "there are many conditions under which contract practice is not only legitimate and ethical, but in fact the only way in which competent medical service can be provided." Judgement of whether or not a contract is ethical, the report said, must be based on the form and terms of the contract as well as the circumstances under which it is made.

In another action related to the issue of free choice, the House adopted a resolution condemning the current attitude and method of operation of the United Mine Workers of America Welfare and Retirement Fund "as tending to lower the quality and availability of medical and hospital care to its beneficiaries." The resolution also called for a broad educational program to inform the general public, including the beneficiaries of the Fund, concerning the benefits to be derived from preservation of the American right to freedom of choice of physicians and hospitals as well as observance of the "Guides to Relationships Between State and County Medical Societies and the UMW Welfare and Retirement Fund" which were adopted by the House last June.

The Heller Report

Acting on the report of the Committee to Study the Heller Report on Organization of the American Medical Association, the House reached the following decisions on ten specific recommendations:

1. The office of Vice-President will be continued as an elective office.

2. The offices of Secretary and Treasurer will be combined into one office to be known as Secretary-Treasurer, and that officer will be selected by the Board of Trustees from one of its number.

3. The duties of the Secretary-Treasurer will be separated from those of the Executive Vice-President.

4. The office of General Manager will be discontinued, and the new office of Executive Vice-President will be established. The latter, appointed by the Board of Trustees, will be the chief staff executive of the Association.

5. The Council on Medical Education and Hospitals and the Council on Medical Service will continue as standing committees of the House of Delegates, but their administrative direction will be vested in the Executive Vice-President.

6. The voting members of the Board of Trustees will be limited to eleven—the nine elected Trustees, the President and the President-Elect. The Vice-President and the Speaker and Vice-Speaker of the House of Delegates will attend all Board meetings, including executive sessions, with the right of discussion but without the right to vote.

7. The House disapproved of the proposal to elect the Trustees from each of nine physician-population regions.

8. The office of Assistant Secretary will be discontinued, and a new office of Assistant Executive Vice-President will be established.

9. The Committee on Federal Medical Services will be retained as a committee of the Council on Medical Service and will not become a part of the Council on National Defense.

10. The Speaker of the House will appoint a joint and continuing committee of six members, three from the Board of Trustees and three from the House, to redefine the central concept of A.M.A. objectives and basic programs, consider the placing of greater emphasis on scientific activities, take the lead in creating more cohesion among national medical societies and study socio-economic problems.

The accepted recommendations were referred to the Council on Constitution and By-laws with a request to draft appropriate amendments for consideration by the House at the 1958 annual meeting in San Francisco.

The Forand Bill

The House condemned the Forand Bill as undesirable legislation, approved the firm position taken in opposition to it, and expressed satisfaction that the Board of Trustees has appointed a special task force which is taking action to defeat the bill. In a related action, giving strong approval to Dr. Allman's address at the opening session, the House adopted a statement which said:

"It is particularly timely that our President has so forcefully sounded the clarion call to the entire profession for emergency action. With complete unity (defi-

...nition and singleness of purpose, closing of ranks with all age groups and elements of our organization we must at this time stand and be counted. Thus we can exert the physician's influence in every possible direction against invasion of our basic American liberties in the form of proposed legislation alleged to compulsory insure one segment of the population against health hazards at the expense of all."

Health Programs for Hospital Employees

A set of "Guiding Principles for an Occupational Health Program in a Hospital Employee Group" was approved by the House. The guides were developed by a joint committee of the American Medical Association and the American Hospital Association and already had been formally approved by the A.H.A. They include these statements:

"Employees in hospitals are entitled to the same benefits in health maintenance and protection as are industrial employees. Therefore, programs of health services in hospitals should use the techniques of preventive medicine which have been found by experience in industry to approach constructively the health requirements of employees.

"It is essential that employee health programs in hospitals, as in industry, be established as separate functions with independent facilities and personnel. The fact that hospitals are engaged in the care of the sick as their primary function does not alter the necessary organizational plan for an effective occupational health program."

Asian Influenza Vaccine

The House considered three resolutions dealing with the Asian influenza immunization program and then adopted a substitute resolution calling attention to "certain inadequacies and confusions in the distribution of vaccines" and directing the Board of Trustees to seek conferences through existing committees "with a view to establishing a code of practices regulating the future distribution of important therapeutic products, so that the best interest of all the people may be served." The resolution pointed out that the American Medical Association already has a joint committee with the American Pharmaceutical Association and the National Association of Retail Druggists, in addition to a liaison committee with the Drug Manufacturers Association.

Medical Rating of Physical Impairment

The House accepted a 115-page "Guide to the Evaluation of Permanent Impairment of the Extremities and Back" which was developed by the Committee on Medical Rating of Physical Impairment as the first in a projected series of guides. The delegates commended the committee for doing "a superb job on this difficult subject" and expressed pleasure that the guides will be published in the *Journal of the A.M.A.* The guides are expected to be of particular help to physicians in

determining impairment under the new disability benefits program of the Society Security Act.

Miscellaneous Actions

Among a wide variety of other actions, the House also:

Directed that a new committee be established in the Council on Industrial Health to study *neurological disorders in industry*;

Noted with approval the establishment of the American Medical Research Foundation, which will initiate and encourage necessary *medical research* and correlate and disseminate the results of studies already under way;

Decided that informational materials which are sent to A.M.A. delegates should also be sent to all *alternate delegates*;

Affirmed that it is within the limits of ethical propriety for physicians to join together as partnerships, associations or other *lawful-groups* provided that the ownership and management of the affairs thereof remain in the hands of licensed physicians;

Instructed that the appropriate committee or council should engage in conferences with *third parties* to develop general principles and policies which may be applied to the relationship between third parties and members of the medical profession;

Urged state medical society committees on aging and insurance to make continuing studies of *pre-retirement financing of health insurance* for retired persons;

Endorsed a suggestion that the Committee on Federal Medical Services sponsor a national conference on *veterans' medical care* during 1958;

Asked the Board of Trustees to study the feasibility of having the Association finance a thorough investigation of the *Social Security* system by a qualified private agency;

Suggested that physicians and their friends make a vigorous effort to obtain Congressional enactment of the *Jenkins-Keogh Bills*;

Approved the "Suggested Guides to Relationships Between Medical Societies and *Voluntary Health Agencies*";

Strongly recommended that a completely adequate and competent medical department be established in the *Civil Aeronautics Administration* directly responsible to the CAA Administrator, and

Congratulated the General Electric Company for its medical television presentations on the subject of *quackery*.

George F. Lull, M.D.,
Secretary-General Manager,
American Medical Association.

MEDICAL EDUCATION WEEK April 20-26, 1958

TO FOCUS ATTENTION ON and to inform the public of the ever-increasing contribution of medicine to American life, and of the basic significance of medical education, it is suggested that one week be set aside each spring for a joint public education effort by the medical schools, the medical profession and their allies.

The general objectives shall be to develop public understanding of the progress, aims, and problems of medical education with the hope of stimulating its more

adequate financial support by the public. To achieve these objectives, it is suggested that efforts be directed toward informing the public of the comprehensive role of the medical schools, in education, research and service. This should call attention to the contribution of medical schools in the education and training of large numbers of individuals in allied areas as well as in under-graduate, graduate, and post-graduate fields of medicine.

It's Annual Session Time Again...

APPLICATION FOR HOTEL ACCOMMODATIONS
Medical Association of Georgia 1958 Annual Session
April 27, 28, 29 and 30, 1958, Macon

A Housing Bureau has been established for your convenience in making your hotel reservations in Macon for the 1958 ANNUAL SESSION of the Medical Association of Georgia. Comparable room rates are listed. Use the Reservation Blank below. Please specify your first, second and third choice hotel. All requests for reservations should give: (1) anticipated date and hour of arrival; (2) date and approximate hour of departure; and (3) names and addresses of all persons who will occupy the accommodations. ALL RESERVATIONS MUST BE CLEARED THROUGH THE HOUSING BUREAU. Since all requests for rooms will be handled in *chronological* order, you should mail your application as early as possible. All reservations will be confirmed.

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GEORGIAN HOTEL	4.00- 4.50	6.00- 7.00	
LANIER HOTEL	4.00- 4.50	6.00- 10.00	
Motels			
AMBASSADOR MOTEL	\$4.50-\$6.00	\$6.50-\$8.00	\$7.50-\$9.00
MAGNOLIA COURT	4.00 and Up	\$5.00 and Up	
PINEBROOK INN	4.50	\$6.00 and Up	
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HOLIDAY INN OF MACON	6.50	\$9.50	

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Arrival date _____	hour _____ A.M. _____ P.M.
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THE NAME OF EACH HOTEL GUEST MUST BE LISTED. Include the names of all persons for whom you are requesting reservation and who will occupy the room(s):

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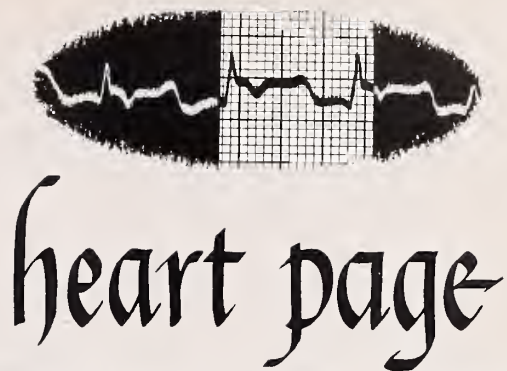
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If the hotels of your choice are unable to accept your reservation the Housing Bureau will make as good a reservation as possible elsewhere.

One Hundred Dollar Prizes

L. MINOR BLACKFORD, Atlanta, Ga.



CARDIOVASCULAR DISEASE, it could be said, is at this time captain of the men of death. Now that the infectious diseases are under control and surgical miracles are being accomplished every day, the circulatory system presents problem number one.

Without belittling the work of the father of modern cardiology, James MacKenzie, nor of his brilliant student, Thomas Lewis, they little more than scratched the surface. Though some progress has been made in the study of hypertension, we know almost nothing about the etiology of arteriosclerosis. We need to know much more about the pathology of the failing circulation. The surgeons have entered the field with gusto and success. It is less than twenty years since Robert Gross first ligated a patent ductus; only thirteen since Alfred Blalock, who grew up in Jonesboro, Georgia, operated on a "blue baby." Now the heart surgeon is ready to operate on almost any type of congenital heart disease, as well as rheumatic lesions of the valves. But why do some children recover from rheumatic fever without heart injury? Why do some recover with varying degrees of damage, and others die during the acute stages?

The young physician finds exciting novelty in treating his own patients: he brings in a fresh point of view and he may well note things that have escaped more seasoned though less enthusiastic observers. He should be encouraged to report his experiences.

Such writing is hard work. Yet it is most rewarding. It encourages the author to make more careful and accurate observations, and it encourages him further to study what other men have written along similar lines. It thus makes him a better doctor.

To encourage the writing of papers pertaining to cardiovascular problems, four years ago the Georgia Heart Association offered an annual prize of one hundred dollars for the best paper submitted. The rules are simple. House officers, residents and fellows in Georgia hospitals, Georgia doctors who have not

been engaged in private practice more than five years, whether currently so engaged or in military service, are eligible. He may have the advice and collaboration of an older hand, provided that the senior says the applicant has done most of the work. The only other requirement is that the paper must be sent to the Heart Association by June 30. It must be remarked, however, that the Prize Awards Committee reserves the right to withhold the money if it considers no paper submitted worthy of the money.

We know that our cardiologists and internists are good. We cannot believe that they fail to recognize this fact. And yet the response to the offer has been disappointing. It would appear that our young doctors have not been sufficiently apprized of this opportunity: they cannot be lazy. Granting that one hundred dollars is no fortune, what man with not more than five years of practice can afford to turn up his nose at a hundred dollars? Two years ago two Atlanta cardiologists with an average of twenty years of practice were happy to receive similar prizes from the Fulton County Medical Society. The honor of course is much greater than the intrinsic value of the prize.

The first year the prize was offered, no doctor in Georgia presented a paper. In 1956, Dr. Frank Salomone of Italy and Dr. E. R. Duchesne of England submitted a paper on the experimental evaluation of various methods suggested for the improvement of the blood flow through an infarcted myocardium. Dr. William H. Madison turned in a superb case report on chylopericardium. The Committee awarded the first prize to the authors of the experimental paper, but inaugurated a second prize for the clinical one. Last year Dr. Milton F. Bryant presented "The Experimental Evaluation of Replacement Grafts in the Venous System," and Dr. William E. Holladay, "The Tetralogy of Fallot: Variations of its Clinical Manifestations." It was impossible to compare the clinical work with the experimental, so the Committee asked the Directors

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

HEART PAGE / Continued

for a hundred dollar prize for each, and at the September meeting of the Heart Association a check for this amount was given each author.

It may be remarked again that so far no graduate of the Medical College of Georgia nor of Emory University has submitted a paper. Are the teachers of our own medical schools falling down on the job of inspiring their undergraduates?

NEW MEMBERS of the MAG

<i>Name</i>	<i>Address</i>	<i>Classification</i>	<i>County Society</i>
Earnest C. Atkins	VA Hosp., Brookhaven	DE 2	DeKalb
Joe D. Beasley	231 E. Ponce de Leon, Atlanta	Active	DeKalb
John Richard Castle	231 E. Ponce de Leon, Atlanta	Active	DeKalb
E. L. Harrell	Chaneldo Apts., Jesup	Active	Wayne
Donald R. Rooney	Emory University	DE 2	Fulton
James Cecil Toole	Clayton	Active	Rabun
Wesley Glenn Petty	Chatsworth	Active	Whitfield
H. Duane Blair	36 Butler Street, Atlanta	DE 2	DeKalb
Warren Dickey Stribling	608 E. Broad St., Gainesville	Active	Hall
Jack L. Cantor	Statesboro, Georgia	Active	Bulloch-Chandler-Evans
Timothy Harden, Jr.	603 Medical Arts Bldg., Atlanta, Ga.	Active	Fulton
Theodore Joseph Haywood	Masonic Building, 2600 Parkwood Dr., Brunswick, Ga.	Active	Glynn
Herbert Kirchman	502½ G Street, Brunswick, Ga.	Active	Glynn
Constantine P. Lampros	610 Bapt. Professional Bldg., Atlanta, Ga.	Active	DeKalb
Jimmie W. Morgan	215 Doctors Building, 478 Peachtree St., Atlanta, Ga.	Active	DeKalb
Milledge G. Smith	301 Mansfield St., Brunswick, Ga.	Active	Glynn
Sarah L. Clark	1280 Merry Street, Augusta	Active	Richmond
William Richard Greco	3200 Kemble Ave., Brunswick	Active	Glynn
Elizabeth Jane Thompson	1280 Merry Street, Augusta	Active	Richmond
Argin A. Boggus	Dahlonega	Active	Hall
William W. Hodges	3110 Peachtree Dr., N.E., Atlanta 5	Active	Fulton
Dewey E. Overton	101 S. Church Street, East Point	Active	Fulton
James D. Schuler	Ellijay	Active	Blue Ridge
William H. Sewell	Emory Univ. Clinic, Emory University	Active	Fulton
James E. Anthony, Jr.	348 W. Ponce de Leon Ave., Decatur	Active	DeKalb
William H. Cabaniss, Jr.	765 S. Milledge Avenue, Athens	Active	Crawford W. Long
Jennings Melvin Grisamore	303 Smith Street, LaGrange	Active	Troup
Wade H. Shuford	Grady Hospital, 36 Butler Street, S.E., Atlanta 3	Active	Fulton
Thomas Francis O'Donnell	Atlantic Coast Line Hospital, Waycross	Active	Ware
William Thomas Arial	21 Clarkesville St., Cornelia	Active	Habersham

BOOKS RECEIVED

James, D. Geraint, M.D., **THE DIAGNOSIS AND TREATMENT OF INFECTIONS**, Charles C. Thomas, Publisher, Springfield, Illinois, November 1957, 224 pp., \$6.00.

Meyer, Oscar Daniel, M.D., **THAT DEGENERATE SPIROCHETE**, Vantage Press, Inc., New York, 1952, 316 pp., \$5.00.

Coates, Col. John Boyd, Jr., M. Elliott Dandolph, M.D.; Norton Canfield, M.D.; Elizabeth M. McFetridge, M.A. **SURGERY IN WORLD WAR II, OPHTHALMOLOGY AND OTOLARYNGOLOGY**, Medical Department U. S. Army, 548 pp., \$5.00.

Wolstenholme, G. E. W., OBE, and Elaine C. P. Millar (Editors), **HORMONES IN BLOOD**, Little, Brown, and Co., Boston, Mass., 1957, 409 pp., \$9.00.

Wilson, J. Walter, M.D., **CLINICAL AND IMMUNOLOGIC ASPECTS OF FUNGUS DISEASES**, Charles C. Thomas, Publisher, Springfield, Illinois, 1957, 244 pp.

Perry, Eldon T., **THE HUMAN EAR CANAL**, Charles C. Thomas, Publisher, Springfield, Illinois, December 1957, 102 pp., \$4.75.

Lamb, Lawrence, E., M.D., **FUNDAMENTALS OF ELECTROCARDIOGRAPHY AND VECTORCARDIOGRAPHY**, Charles C. Thomas, Springfield, Illinois, November 1957, 138 pp., \$9.50.

Wilkler, Abraham, M.D., **THE RELATION OF PSYCHIATRY TO PHARMACOLOGY**, The Williams and Wilkins Company, Baltimore, Md., 270 pp., \$4.00.

REVIEWS

Palmer, Harold, M.D., **PSYCHOPATHIC PERSONALITIES**, Philosophical Library, Inc., New York, 1957. 175 pp., \$4.75.

This book by an English psychiatrist covers the major mental illnesses with emphasis on various symptomatology. The title infers the content to be on character and behavior disorders, which is actually emphasized only in the first chapter. The remaining book is divided into main headings such as schizophrenia, depressive states, obsessions, hysteria, epilepsies, tension syndromes, and mania.

The author has reviewed schizophrenia and depressive states well, but his general theme is philosophical, yet interesting in its scope. Unfortunately, little is said about psychotherapy and drug therapy, and there is over-emphasis on lobotomy.

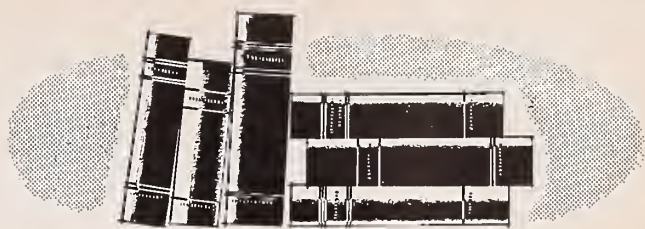
The book is recommended for purposes of general reading to the specialist, but is not sufficiently conclusive for use as a text in psychiatry.

August S. Yochem, Jr., M.D.

Wenger, H. Leslie, **THE SPINE JACK OPERATION**, New York, 1957, 86 pp.

The treatment of scoliosis in the hands of skilled and experienced orthopedic surgeons is often complex and baffling. There is no one completely satisfactory method of correcting the abnormal structural curve. The author of this small book introduces a new method of treatment which is at least unique. The procedure consists of the insertion of a spine jack metal prosthesis on the concave side of the primary curve. The apparatus consists of a hexagon shaped turnbuckle shaft attached to an upper and lower post containing a screw. The screws vary in length and diameter, depending upon the size

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.



physician's bookshelf

of the vertebrae to be used as fixation points.

It is the author's opinion that the apparatus serves to correct the lateral curve by direct pressure against the vertebral bodies. The distraction force on the concave side of the curve may in turn retard growth at the epiphyseal plates on the convex side of the curve.

Supplementary surgery consists of the resection of the transverse processes and the medial two inches of the ribs. This is usually done for an average of eight interspaces.

Patients are said to recover from the operation in approximately one day and are ambulatory in five to seven days. There is straightening of the curvature and an increase in the height of young individuals. One of the disadvantages is that the assistance of a thoracic surgeon is required. It is not without danger.

Although this small book is interesting and well worth reading, it is doubtful if many orthopedic surgeons will forsake conventional means of correcting scoliosis for the spinal jack.

Wood Lovell, M.D.

Keeney, Arthur Hail, M.D., **LENS MATERIALS IN THE PREVENTION OF EYE INJURIES**, Charles C. Thomas, Springfield, Illinois, 63 pp., \$3.50.

The author reviews the history of the technical development of protective lens materials and covers his own experimental studies in the evaluation of various lenses as to hardness, impact resistance, fracture patterns, thermostability, resistance to chemicals, density to Roentgen rays, flammability, birefringence patterns, etc. In passing he mentions the first definitions of hardness, formulated in 1640 by A. Barba, namely: "Hardness is such property of precious stones that those which a file can scratch are not so classed."

The author discusses also the relative merits of plastic lenses; these have greater impact resistance but scratch more easily. He makes a plea for wider use of protective lenses and concludes that conventional crown glass is indicated only for individuals confined to sedentary occupations or using spectacles only for reading.

This booklet's greatest appeal should be to those physicians who might be advisors to industrial safety directors.

Harry M. McAllister, M.D.

Weiss, Edwards, M.D., and English, O. Spurgeon, M.D., **PSYCHOSOMATIC MEDICINE**, Third Edition, W. B. Saunders Company, Philadelphia, 1957, 557 pp.

It is estimated that about a third of patients with chronic illness fall into the group of purely psychosomatic illness, another third have organic disease but have symptoms that are in part due to emotional factors, and another third have purely organic disease. Obviously a book of this nature will find wide acceptance as it has in the past. The authors stress the importance of the psychosomatic approach when studying the patient—what kind of an individual is he, from what kind of environment did he come, and what has happened to his body mechanisms?

Part one of this book is devoted to general aspects of psychosomatic medicine. The authors devote considerable space to personality development. Much emphasis is placed on parental attitudes and childhood experiences and conflicts in the development of the abnormal personality. Little mention is made of the current emphasis on psychopharmacology and neuropharmacology as possible factors in the etiology of mental disease. Psychoneurotic disorders, psychotic disorders, and personality disorders are considered. The mechanisms of psychosomatic disorders are discussed. A chapter is devoted to psychosomatic diagnosis, stressing the importance of a detailed history in the psychosomatic approach. Another chapter is devoted to the techniques of psychotherapy. In this regard the tranquilizing drugs are considered as useful adjuncts to psychotherapy but should not be expected to replace it.

Part two of this book is devoted to special applications in the field of general medicine and the specialties. Each anatomical system is considered, and case histories are effectively used in illustrating the various psychosomatic disturbances.

The book is well organized and readable and furnishes ample references for those who wish to read further in this field.

Oscar M. Mims, M.D.

Dripps, Robert D., M.D.; Eckenhoff, James E., M.D.; Vandam, Leroy D., M.D., **INTRODUCTION TO ANESTHESIA**, W. B. Saunders Company, Philadelphia, 1957, 266 pp., \$4.75.

Here indeed is "An Introduction to Anesthesia." The authors have briefly covered the more important fundamentals of anesthesia. It is well written, easy to read, and full of valuable information. There are times when one wishes the authors had gone into more detail, but detail is not the purpose of this small volume. It does, however, encourage those interested in the subject to look to other reading matter for the more detailed information which is lacking.

While it is primarily intended for the medical student, intern, and first year resident, those occasional anesthetists could gain a vast amount of knowledge from this book. Even the surgeon and internist could gain a better understanding of the joint problems of

the anesthesiologist and other medical specialties.

If this book were universally adopted by medical schools it would certainly stimulate more interest in anesthesia and probably encourage more students to follow this young and growing specialty.

Frank A. Little, M.D.

Northrup, Eric, **SCIENCE LOOKS AT SMOKING**, Coward-McCann, Inc., New York, 1957, 190 pp., \$3.00.

Perhaps a better title for this book would be "smokers look at smoking." It is no doubt a cleverly written and appealing presentation of most of the current investigations concerning smoking and its correlation with cancer. However, its appeal is primarily to the smoker, and reading the text will assuage any and all misgivings he or she may have about continuing the habit.

Even in the introduction Dr. Harry S. N. Green, Chairman of the Department of Pathology of the Yale University, admits he has smoked tobacco in some form for the past forty years, and that prior to that he used sweet fern and grape leaves in abundance. In conclusion he further states that "I will still continue to smoke, and if the tobacco manufacturers cease to manufacture their product I will revert to sweet fern and grape leaves." Mr. Northrup has compiled in a very readable fashion a brief review of most all of the statistics on smoking which are being discussed so frequently at the present time; and for those of you who would like a ready reference to these, I would certainly recommend this book as source material. The author has treated somewhat lightly the conclusions of investigators such as Drs. Hammond and Horn, who have just reported on their monumental statistical investigation through the American Cancer Society. In my mind the latter quite firmly established the causal relationship between smoking and cancer of the lung. In addition the author treated in a similar vein the investigation which Dr. Oscar Auerbach has recently reported in his painstaking and thorough pathological investigation of smokers, which he is conducting through the facilities of a New Jersey Veterans' Administration Hospital. I have talked personally with Dr. Arthur Purdy Stout concerning Dr. Auerbach's investigation, and it is his studied opinion (and he has seen many of the innumerable slides) as well as that of Dr. Auerbach's, that there is a definite causal relationship between smoking and carcinoma of the lung. Both of these men have established reputations as investigators and conductors of research.

In conclusion the book is entertaining and informative and for those of you especially who smoke I heartily recommend it for an evening's reading. As you can plainly see, this review has been written by a non-smoker.

Robert H. Vaughan, M.D.

Stern, Neuton S., M.D., and Stern, Thomas N., M.D., **THE BASES OF TREATMENT**, Charles C Thomas, Springfield, Illinois, 1957, 166 pp., \$4.75.

This small volume of basic therapeutic principles is intended for both the practicing physician and for the student. The authors, teachers in the College of Medicine of the University of Tennessee, have presented their philosophy of therapy as well as their philosophy of medicine. Their thoughts might be distilled to the following points: Know your patient; know

his disease and its ramifications; know the specific and supportive therapy for this disease; lastly, blend this knowledge with the proper proportions of tact, humility, compassion, and honesty.

The book is divided into three sections entitled "The Bases of Therapy," "Care of the Patient," and "Special Cases in Therapy." These sections are further divided into chapters dealing with the psychophysiology of various disease processes, fluid balance and electrolytes, diet, nursing care, pharmacology, prophylaxis, iatrogenic diseases, and psychotherapy. The authors state that this is not a reference book and they have avoided, as far as possible, giving detailed advice for specific diseases.

Most of the material is well presented. Unfortunately, there are several chapters, notably the one on diet, where sentence structure is poor, phrasing is awkward, and statements are confusing. For example, on page 74, this statement is made: "Even proteins are used especially for their carbohydrate fraction." Later on the same page we find this statement at the beginning of a sentence: "The normal heat production necessary to maintain the human at rest at normal temperature is measured by the basal metabolic rate; . . ."

The authors' basic philosophy is indisputably excellent. Their "Introduction" and the chapter on "Confidence in the Physician" can be read with profit by everyone seeing patients, especially the young physician entering practice. The remainder of the book should be of value to medical students, because it tries to do that which is so difficult for the highly specialized medical school professor—to show the broad picture without getting lost in the minutiae. For that large body of practicing physicians, I do not believe that this book presents enough new material or rephrases clearly enough the old material to warrant the time to read it.

Nicholas E. Davies, M.D.

Wallerstein, Robert S., M.D., and Associates, HOSPITAL TREATMENT OF ALCOHOLISM, Basic Books, Inc., New York, 1957. 224 pp., \$5.00.

At first glance, the title of this Menninger Clinic Monograph will lead one to expect a treatise on the over-all hospital treatment of alcoholism. Turning within, however, the sub-title properly describes it as "A Comparative, Experimental Study." More specifically the authors are reporting their observations and results of a two-and-one-half-year research project on the comparative and experimental study of four different treatment methods for chronic alcoholism which was carried out in a closed ward setting of the Winter Veterans Administration Hospital, Topeka. A total of 178 patients were assigned at random to one of the following methods: (1) Antabuse Treatment; (2) Conditioned-Reflex Treatment; (3) Group Hypno-

therapy; and (4) Milieu Therapy. Except for the specific modality for each group, all patients received the same work-up, ward routine, and had agreed to the same time of treatment and follow-up. Included in the over-all evaluation was a personality study so that each patient could be generally classified according to his primary personality pattern. In the evaluation of progress and improvement of patients of the four groups, the authors wisely and properly emphasize the importance of the over-all integrated level of functioning attained by the alcoholic patient. Accordingly, the results were evaluated not only by the degree of abstinence, but as to social adjustment, subjective feelings of difference and structural changes in personality configuration. It was also desired to discover which patient, in terms of personality characteristics did best with which treatment modality.

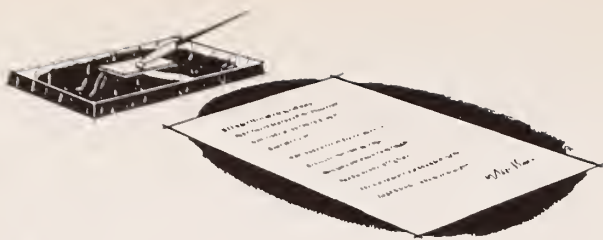
Each method of treatment is described in detail. Of the four procedures Antabuse therapy was the most helpful to the largest number of patients. In this group 53 per cent were improved, as compared with 36 per cent improved with group hypnotherapy, 26 per cent with milieu therapy, and only 24 per cent with conditioned-reflex therapy. Studying the relation of the personality characteristics of the patient to each method of treatment, it was found that compulsiveness was a measure of good prognosis with Antabuse. The passively-dependent patient was thought to have a better prognosis with hypnotherapy. For the borderline psychotic patient the milieu program, with greater opportunity for individual psychotherapy, seemed more promising and Antabuse contraindicated. The overly depressed patient seemed to respond best to conditioned-reflex therapy. The prognosis for the strongly aggressive patient was particularly poor with all methods of treatment. Finally, it was observed that with all four methods the greater the patient's capacity for "meaningful interpersonal relationships and the greater the potential for forming a dependent tie to the therapist and to the hospital, the better the prognosis."

The authors are aware of the limitations of their study in that it does not represent a true cross-section of the whole alcoholic population, but only of those male alcoholics who were particularly selected for a voluntary program of treatment on a closed ward of a public mental hospital and under certain specific stipulations. It is also considered limited in that only four of the several methods, or combination of methods, of treatment were used and each in a particular and unvarying way. Little, if any, new information is offered in this interesting and well planned study, but it does focus attention more strongly upon the importance of individualized therapy of the alcoholic patient, his needs for emotional and social readjustment and the use of any and all methods which might contribute to his rehabilitation. *James N. Brawner, Jr., M.D.*

RURAL HEALTH CONFERENCE SCHEDULED

CHANGING PATTERNS IN NUTRITION, health costs, medical care, dental health, and safety will serve as the focal point for discussion at the 13th National Conference on Rural Health to be held March 6-8 at the Hotel Heidelberg, Jackson, Miss. The conference is sponsored by the AMA's Council on

Rural Health in cooperation with southern state medical associations and farm, educational, and allied organizations. Following the theme — "As the World Turns" — the conference will open Thursday morning, March 6. All physicians are urged to attend this important meeting.



abstracts by georgia authors

Fowler, Noble O., M.D., Orson Smith, Medical Student, and Joseph C. Greenfield, Medical Student, Emory University School of Medicine, Emory University, Georgia, "Arterial Blood Oxygenation in Sickle Cell Anemia," *Am. J. Med. Sciences* 234:449-458 (Oct.) 1957.

Arterial blood oxygenation was studied in 11 normal subjects, in 10 patients with sickle cell anemia, and in eight patients with other types of anemia. All patients with sickle cell anemia had a reduction in arterial oxygen saturation, with values ranging between 80 and 92.6 of capacity. The patients with sickle cell anemia, as a group, low arterial oxygen tensions, and increased alveolar-arterial oxygen tension gradients. Studies of oxygen saturation of sickle and normal hemoglobin at comparable oxygen tensions and pH showed consistently a lower uptake of oxygen by sickle hemoglobin than by normal hemoglobin.

Subjects with nonsickle cell anemia had a higher arterial pO₂ than the sickle cell patients and all save one had a normal systemic arterial oxygen saturation.

It is concluded that the low arterial oxygen saturation in sickle cell anemia is due to two factors: one, an increased alveolar-arterial oxygen tension gradient, the other an abnormal oxyhemoglobin dissociation curve. Patients studied with nonsickle cell anemia were able to maintain a relatively normal systemic arterial oxygen saturation because of a lower mean alveolar-arterial oxygen tension gradient than that seen in sickle cell anemia, and because of the presence of a more nearly normal oxyhemoglobin dissociation curve.

Collohon, Don and Zeb L. Burrell, Medical College of Georgia, Augusta, Georgia, "Agranulocytosis-Iatrogenic Disease," *Am. Practitioner-Digest of Treatment* 8:1766-1770 (Nov.) 1957.

This paper deals with the detailed history and clinical records of five patients who developed acute granulocytic suppression following the administration of dipyrone, chlorpromazine, and mesantoin. Dipyrone, the active component of glusalgin® (an antiarthritic drug) was responsible for three cases. One

case of agranulocytosis each is reported for chlorpromazine and mesantoin.

All the incriminated drugs, and many such others, are prescribed regularly by almost every physician, but few find time or convenience to carry out careful repeated examinations of the patient and to do the appropriate laboratory tests to detect toxic effects. Frequent white cell counts are strongly recommended and the promiscuous use of drugs reported to produce agranulocytosis is discouraged. Some significance is also attached to the finding that four of the five patients reported on presented themselves with severe pharyngitis which was intractable to vigorous antibiotic therapy. This factor may serve to draw the attention of the astute physician to the possible loss of phagocytic function of the white cells of the blood.

Thoroughmon, J. C. and C. E. Barrineau, V.A. Hospital, Atlanta, Georgia, "Spontaneous Rupture of Pseudocysts of the Pancreas," *Am. Surgeon* 23:831-836 (Sept.) 1957.

Although spontaneous rupture of pseudocysts of the pancreas does not occur frequently in the experience of any one doctor, the high mortality resulting from this catastrophe warrants the report of two additional cases and a discussion of this complication.

Pancreatic pseudocysts vary in etiology, size, rate of development, symptomatology, clinical, and x-ray characteristics. Complications frequently occur and may consist of (1) obstruction, usually pyloric, (2) hemorrhage into the cyst, or (3) perforation. Perforation probably occurs as the result of necrosis secondary to intra-abdominal pressure, hemorrhage, or antecedent trauma. If perforation occurs into the free peritoneal cavity, fatal shock may ensue.

The symptoms produced by unruptured cysts are primarily due to the pressure effects of an upper abdominal mass. The symptoms prodromal to rupture are considered to be upper abdominal distress, nausea, and vomiting. Sudden excruciating pain associated with shock is the most dramatic symptom of rupture. A silent abdomen, rigidity, and leucocytosis are usually present.

The high mortality rate resulting from rupture argues for definitive treatment prior to such a catastrophe. Should rupture occur, immediate evacuation of the spilled contents with either drainage of the cyst or marsupialization is recommended.

Frech, Henry C. and L. Richard Lonier, Jr., M.D., The Georgia Infirmary, Savannah, Georgia, "Injuries to the Bowel as the Result of an Enema," *Am. J. Obst. & Gynec.* 74:1146-1149 (Nov.) 1957.

A case of traumatic perforation of an apparently undiseased sigmoid with a postoperative enema is presented. On the fifth postoperative day following total abdominal hysterectomy the patient, a 35-year-old colored female, received a soap suds enema. Following this she had abdominal pain and sweating.

The patient died of a generalized peritonitis on the 19th postoperative day. Autopsy revealed generalized peritonitis, subdiaphragmatic abscess, and left lung abscess.

A review of the literature reveals about thirty similar cases. Most have had a fatal outcome. It is suggested that at the time the accident is suspected sigmoidoscopic examination be performed and a catheter placed in the area of perforation to be used as a guide at laparotomy.

Most such accidents would be avoided if all persons giving enemas were instructed not to use large rectal tubes, and not to insert them any further than past the internal sphincter.

Burrell, Zeb L., Medical College of Georgia, Augusta, Georgia, "Acquired Megacolon in the Insane," *Gastroenterology* 33:625-630 (Nov.) 1957.

Acquired megacolon in the insane is described as a syndrome characterized by massive dilatation of the colon occurring in chronically insane, usually schizophrenic, patients. In the absence of complications, it is characterized by lack of symptoms other than tremendous distention. In the absence of complications there is no abnormality of electrocardiographic conduction, of serum electrolytes, or blood counts. The most common complication is volvulus of the tremendously enlarged sigmoid.

None of the several forms of conservative management have been of consistent help in these patients, and it is suggested that surgical intervention is probably warranted. We speculate that this is the end result of extreme chronic constipation and pathologically is characterized by loss of autonomic innervation of the bowel. No ganglion cells were demonstrated in a single autopsy specimen.

Hamilton, William F.; James O. Davis; David S. Howell; Robert G. Ellison; Elmer E. Hague; and Walter J. Brown, Jr., Medical College of Georgia, Augusta, "Experimental Mitral Stenosis and Ascites Formation," *Am. J. Physiol.* 190:500-502 (Sept.) 1957.

Extreme care must be taken in the production of experimental mitral stenosis in dogs by the method of controlled progressive constriction of the mitral ring in order to prevent the inadvertent

constriction of the thoracic inferior vena cava and resultant elevation of the inferior caval pressure. After a report from Hamilton, Ellison, Hague and Brown (Georgia laboratories) that ascites formation was a common occurrence in dogs with experimental mitral stenosis produced by this technique, an attempt was made by Davis and Howell (Bethesda workers) to repeat these observations. From experiments performed in Bethesda, it was found that a stricture of the thoracic inferior vena cava was produced when the Georgia technique for production of mitral stenosis was used; this construction provided an explanation for the ascites formation. These results were communicated to the Georgia workers who explored the two surviving dogs of their first series and found evidence which suggested that the inferior vena cava was patent even though the dogs were producing ascites profusely. Later, the Georgia group produced mitral stenosis in two additional dogs by the original technique and these animals gave unequivocal evidence that the stricture was present. Great care was then taken by the Georgia workers in placing the constricting ligature to avoid stricture of the orifice of the inferior vena cava. Of the 13 dogs so treated only one produced ascites and it had a small obstruction in the inferior vena cava. These last experiments by the Georgia workers as well as those of the Bethesda group suggest that ascites does not occur secondary to experimental mitral stenosis in dogs.

Rinker, J. Robert, Medical College of Georgia, Augusta, Georgia, "The Management of Physiological Nocturnal Enuresis" *South. M. J.* 50:1354-1356 (Nov.) 1957.

An infant empties its bladder by a simple reflex, a monosynaptic physiological pattern which does not involve the higher centers making it an unconscious act. Approximately ninety per cent of the patients who have wet the bed since birth, excluding organic causes, do so because they have never developed the proper polysynaptic pattern and while asleep the bladder empties automatically, a persistence of the infantile pattern. Treatment is directed to strengthening the polysynaptic pattern by never allowing the bladder to empty unless the patient is awake. Voiding while asleep only fixes the infantile pattern. Aids consist of always awakening the patient before voiding, and reducing the urinary output during the sleeping hours. A nap in the afternoon serves to lessen fatigue and reduce the hours and depth of sleep at night. An exercise of starting and stopping the stream while voiding aids in developing a sphincter control pattern. Children eight years old and over are required to realize that breaking the habit is their responsibility, and direct and subtle measures must be sympathetic but unrelenting in initiating conscious effort. Humiliation and corporal punishment is to be condemned. The majority will break the habit themselves at puberty but delay is an evasion of parental responsibility. Organic causes must be ruled out or evaluated by a competent urologist.

Drawhorn, Chester W., Emory University, Georgia, "The Transfer of Water (Deuterium Oxide) Across the Pleural and Peritoneal Membranes," *Surg. Gynec. & Obstet.* 105: 417-420 (Oct.) 1957.

The absorption of crystalloids and colloids from the peritoneal and pleural cavities has intrigued many investigators in the past. The present study of the transfer of deuterium oxide across the serous surfaces was undertaken to determine the rate of water exchange across the peritoneal and pleural membranes. This study was carried out on four patients. One hundred grams of deuterium oxide (99.8 per cent pure), or isotonic saline, was instilled into the serous cavity at operation or thoracentesis. Venous blood samples were obtained at intervals and then shipped via air to the Mass Spectrometry Section of the National Bureau of Standards where analysis was performed. The equilibration time of heavy water following intrapleural or intraperitoneal injection of 100 grams was found to be approximately one hour.

Burns, John K. III, Gainesville, Georgia, and John R. McCain, Emory University School of Medicine, Emory University, Georgia, "Maternal Complications in the Delivery of Infants with Congenital Malformations," *South. M. J.* 50:1321-1329 (Nov.) 1957.

The pregnancies of 212 patients who delivered infants with congenital malformations are reviewed. Spontaneous abortions had occurred before the current pregnancy in 20.3 per cent of the patients.

Polyhydramnios developed during 25 of the pregnancies being present in 10 of the 14 cases in which the congenital abnormality was diagnosed before onset of labor.

Breech presentation occurred in 30 deliveries being increased in part by high incidence of prematurity and type of congenital malformation.

Operative procedures employed in delivery of 91 or 42.9 per cent of the infants. The breech deliveries and eight hydrocephalic infants delivered by craniotomy were associated with malformation of the infants.

Perinatal mortalities were 88 or 41.5 per cent of the infants. The infants were premature in 73 or 34.4 per cent of 212 cases studied; 49 of the premature babies died.

The 82 patients with infants having anomalies of central nervous system, abnormalities of the bladder or kidneys, or with abnormalities of the cardiovascular system had a high incidence of abortion in previous pregnancies. These infants also had a high incidence of polyhydramnios, premature infants, breech presentations, and a high infant mortality rate.

The 50 infants with skeletal defects and 18 infants with malformations of the urethra were associated with relatively little abnormality of the past obstetric history for the mother, or complication of the pregnancy with the defective infant.

The 62 infants with abnormalities of the gastrointestinal, or of the respiratory systems, or with multiple anomalies were associated with more compli-

cations of their pregnancy than the preceding group but with fewer complications than the first group.

The emotional reaction of the patient after the delivery of a congenitally deformed infant constitutes a real responsibility for treatment by the attending physician.

Dorney, Edward R., Department of Medicine, Emory University, Georgia, "Peripheral A-V Fistula Fifty-seven Years' Duration with Refractory Heart Failure," *Am. Heart J.* 54:778-781 (Nov.) 1957.

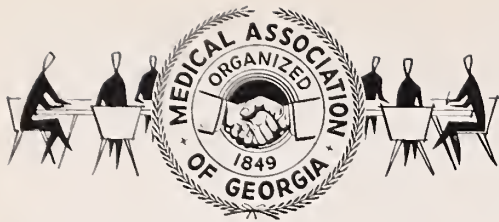
The patient was a 68 year old white man who had been shot in the left leg at the age of 10 years and was told at the time there was a connection between his blood vessels in his leg. This gave him no trouble, however, aside from the fact that he noticed a purring in the left leg in the vicinity of the wound and also found that it became necessary for him to wear elastic stockings to prevent swelling of the left leg. During his lifetime he worked at many jobs requiring strenuous labor with no difficulty. Approximately six weeks before admission, he rapidly went into congestive heart failure and was unresponsive to the usual treatments with low sodium diets, digitalis, and mercurials. He was admitted to the hospital and an excision of the fistula was performed. Following the fistulectomy, he lost a total of 47 pounds without the use of mercurials or low sodium diet. Since discharge, he has gradually regained his strength; and at the present time, he is engaged in his usual activities and taking no cardiac medications. The case was presented in order to re-emphasize the A-V fistula as a cause of refractory congestive heart failure.

Irwin, C. Edwin and James B. Wray, 340 Boulevard, N.E., Atlanta, Georgia, "Experiences with the Use of the Milwaukee Frame in the Treatment of Paralytic Scoliosis," *J. Bone and Joint Surgery* 39A:1020-1026 (Oct.) 1957.

The Milwaukee brace is one of the newer pieces of apparatus used in the treatment of scoliosis. It was designed by Drs. W. P. Blount and Albert Schmidt of Milwaukee. The brace has many advantages over plaster-of-paris. It allows the best of nursing care and does not further impede respiratory function, which is so often affected in post-poliomyelitis patients.

The authors in the October 1957 issue of *Journal of Bone and Joint Surgery* reported their experience with the brace in 117 patients at the Georgia Warm Springs Foundation from 1946 to 1955 inclusive. Since the senior author has been in Atlanta, we have fused 69 spines, 34 of which have been treated with a Milwaukee brace.

The mechanical principles of the brace depend on traction and lateral pressure applied by a pad 45 degrees between the anteroposterior and lateral diameters of the trunk. The pad should lift up on the convexity of the curve. The frame is especially effective for high dorsal curves. It may be used as a holding device for the patient who is not suitable for surgery, or it serves as an excellent means of correcting or improving a curve postoperatively.



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GEORGIA BLOOD BANKS

BLOOD FOR TRANSFUSION and its derivatives have become an important part of the armamentarium of today's medicine.

The multiplicity of skills and technics brought to bear in procuring, processing, storing, and giving of blood and/or its derivatives is carried out by people from many different organized segments of society who have their own mechanisms, economics, and traditions that have developed over the years in carrying out its sphere of activity. In many instances only a facet of those segments are involved, such as hospitals or organizations, whose major function have been broader in scope, but now because of organizational mechanisms and technics, these facets are able to enter into the blood program in some manner or other. Indeed, almost every service, philanthropic, fraternal, or professional has in some community been an active participant. Many commercial endeavors are actually concerned in some fashion or other with all facets of the blood program.

Since this science involves the passage of one portion of an individual into another, in order to succor life and to mitigate illness, it behooves society to place the major responsibility for development and control in the hands of the medical profession, which by tradition and by the rights and privileges and responsibilities inherent in the granting of medical degrees, is best fitted to carry the responsibility. Since so many portions of the arts and sciences hinge around the laboratory, the pathologist, by his special concern with this portion of medicine, as well as his right-hand associates, the medical technologists, should have a dominant role, not only in processing of the blood, but in all its uses, since any of them may determine the effectiveness of the laboratory procedures. Yet, we in no sense want to make this just another medical organization.

Because so many segments of society, diverse in nature, have added their contributions, including many ethical commercial interests, it behooves an

Association of Blood Banks, in being formed, to be composed of all these diverse professions and interests.

All segments of blood banking need to be a functioning part of the Association because there is not an existing society or organization that can foregather all the variegated elements into one meeting in which there can be a free and stimulating exchange of ideas with the goal of furnishing a safer, more efficacious transfusion in the most economical manner practical and feasible to society.

It is assumed that those who belong to the society will benefit from being known as members. This benefit should be recognized only as a reward for striving for a more efficacious and safer transfusion service. Aggrandizement should not be a feature for belonging to the society either for economical reasons or for reasons of personal honor or publicity. It is recognized that rewards must come from better services or new techniques or by improvement of some method or philosophy in the field of providing blood for the communities' or patients' needs.

The prime motive for joining should be the recognition that mutual aid is a fundamental feature of communal life. The mutual aid must be free and unrestricted, but must be conducted in a manner least inimical to other specialized groups of society or potential lines of development, and must always develop from the heritage and customs and usages of the past, but not to be a slave to them.

The above thoughts are some of the nuances from which stem the ethics that are involved in blood banking other than those actions that more clearly endanger life or develop situations that interrupt a flow of blood from donor to recipient.

With these tenets in mind the By-Laws for the Georgia Association of Blood Banking are written.

Georgia Association of Blood Banks Constitution and By-Laws

ARTICLE I—NAME

The name of this organization shall be The Georgia Association of Blood Banks.

ARTICLE II—PURPOSE

For the purposes of this organization, a Blood Bank is a medical facility designed, equipped and staffed to procure, draw, process, store, and distribute human whole blood or its derivatives.

The purpose of this Association shall be:

- A. To promote and foster the exchange of ideas and materials and to disseminate information relating to blood banking and its technical methodology by education, publicity and research.
- B. To foster and plan for cooperation in times of disaster.
- C. To function as a clearing house on questions relating to training of personnel common to such institutions.

- D. To foster and develop a clearing house mechanism for the exchange of blood and/or credits within and without this state.

ARTICLE III—ORGANIZATION

The Georgia Association of Blood Banks shall be organized and incorporated under the laws of the State of Georgia and shall operate only as a non-profit association.

The Board of Directors is hereby designated as agent of the Association with direction to prepare, file, and publish Articles of Incorporation in the State of Georgia, under the name as designated in Article I, and to take such other action and incur such expenses as shall be necessary to perfect Incorporation of this Association.

ARTICLE IV—MEMBERSHIP

- A. Eligibility: Membership in the Association is limited to those participating or interested in an ethical manner in some facet of the blood program. Admission to membership shall be on approval by the membership committee which shall be appointed by the Board of Directors.

- B. Membership shall be designated as:

1. Institutional. An institutional membership shall be open to one official representative from

a. Any ethical blood bank which meets the minimum standards as approved by the Board of Directors for the operation of blood banks in the State of Georgia shall be represented as hereinafter provided.

b. By any other medical facility which operates a blood program not clearly patterned within the above definition of a blood bank, and which may not actually keep a store of blood, but provides blood from a list of donors primarily for its own needs and occasionally for other institutions in the area, shall be represented as hereinafter provided. Standards applicable for this type membership will be approved by the Board of Directors, and the standards must be met by members.

2. Individual membership shall be open to any person interested in blood banking.

- C. Expulsion from membership. Any of the following defaults shall constitute sufficient cause for expulsion of an individual or institutional member:

1. Failure to pay dues as stated in Article X.
2. Failure of an institutional member to meet the minimum requirements of the Association.
3. Any unethical conduct. Charges of unethical conduct against an institutional or individual member must be made in writing by an active institutional member in good standing and submitted to the President who shall appoint a special committee on ethical relations to investigate. The special committee shall report in full, together with recommendations, to the Board of Directors. If the special committee has recommended expulsion, or if three institutional members have, in writing, urged expulsion, the Board of Directors shall then serve written notices of a hearing to the charged member at least thirty days before such hearing, and conduct the hearing. After the hearing, the Board may vote for expulsion or decide to request the member to desist from his unethical practices. If the member persists, he may be declared expelled because of failure to meet the requirements of ethical conduct and shall be so notified. Six votes for expulsion must be received

before a member shall be expelled. After final action, the member shall be notified by the Board as to its final action with a summary of the specific reasons for his expulsion.

If the Board so desires or deems it wise in certain instances, it may forego its prerogative and report all the findings, together with recommendations, to the Association at its next meeting.

The Board, on its own initiative, may investigate a member for unethical conduct. The decision of whether a practice is ethical or unethical will rest with the Board of Directors.

The Board of Directors may evaluate and take action against the member for specific acts or for general practices that they deem unethical by warning or expelling from membership.

Members who are expelled cannot be reinstated for at least one year. For readmission after expulsion, applications for membership must be made in the regular manner and will be processed as any other application.

ARTICLE V—OFFICERS

- A. Election: The officers of the Association shall consist of a President, President-Elect, Vice-President, and a Secretary-Treasurer. The office of President shall be filled by election at the organizational meeting. The President-Elect shall assume the office of the President at the conclusion of the final business session of each regular annual meeting. The President-Elect, Vice-President, and Secretary-Treasurer shall be elected annually and serve until their successors are elected and qualified. Officers shall be limited to members connected with organized blood banks or blood service.

- B. Rights and duties of officers:

1. The President shall preside at the annual and special meetings. He shall be chairman of the Board of Directors. He shall appoint the chairman and members of the standing committees. He shall also appoint special committees as may be formed by the Board of Directors and/or the annual and special meetings of the Association. Upon being succeeded by the duly elected President-Elect he shall become a Past-President. No President may serve more than one term in any five-year period. The President shall countersign all proper checks for money disbursements of the Association funds. The immediate Past-President shall serve as a member of the Board of Directors.
2. The President-Elect is elected at the annual meeting and takes office as President immediately following the next annual meeting. He shall serve as a member of the Board of Directors. He shall cooperate with and assist the President.
3. The Vice-President shall assume the duties of the President in the absence of the President. He shall serve on the Board of Directors. He shall assist in presiding at scientific and business sessions.
4. The Secretary-Treasurer shall serve on the Board of Directors. He shall record the minutes of the regular, special and Board of Directors' meetings. He shall keep a roll of the membership. He shall attend to the correspondence of the Association and edit, or arrange for the editing of any proceedings that may be part of the Association's activity. He shall collect the membership dues, issue receipt for the same, and receive the disbursement funds of the Association. He shall sign all checks for disbursement of the Association's funds. He shall be required to make bond in a sum to be decided upon by the Board of Directors. He shall render an annual report as to the state of the treasury.

ARTICLE VI—BOARD OF DIRECTORS

- A. Composition: The Board of Directors shall be composed of the four officers enumerated in Article V, the Past-President and four members-at-large. One member will be appointed by the State Medical Society. The second member will be appointed by the Georgia Society of Pathologists. The third member will be a Hospital Administrator appointed by the Georgia Hospital Association, and the fourth member will be a Medical Technologist appointed by the Georgia Association of Medical Technology.

At least five board members must be present for the conduction of the Board's business, except where otherwise specified. The Board of Directors shall fill all vacancies on the Board occurring between annual meetings of the Association.

- B. Rights and Duties of the Board of Directors: The Board of Directors shall submit financial and other reports of its trusteeship to the regular annual meetings. The Board of Directors shall appoint a committee on minimum standards for institutional members, and this committee shall submit recommendations to each regular meeting of the Association.

ARTICLE VII—VOTING

- A. Voting privileges of institutional members: Institutional members, as defined in Article IV, shall be entitled to one vote before the Association and shall be represented by an active, responsible member of its staff who is professionally, technologically, or administratively engaged in the procedures and mechanisms of the blood program. No voting by proxy shall be permitted. This means that an institution's voting representatives must be connected with his institution in an overall administrative capacity or be otherwise actively a part of the blood program. No individual may cast more than one vote regardless of the number of blood programs he represents. Thirty per cent of the total voting membership shall constitute a quorum for the transaction of business.
- B. Voting privileges of individual members: An individual member shall have a voice but no vote in any regular or special meeting of the Association. However, if any individual member is appointed or elected to any committee, he shall be entitled to one vote within that committee.

ARTICLE VIII—MEETINGS

- A. Regular Meetings: The Association shall hold a regular meeting at least once each calendar year at a time and place designated by the Board of Directors.
- B. Special Meetings: Special meetings may be called by the Board of Directors with authority in the Board to designate time and place.

- C. Notice of Meetings: At least thirty day's notice shall be given members of any regular or special meeting.

- D. Business Sessions: The President shall serve as chairman of the business sessions and 30 per cent of the institutional members in person shall constitute a quorum.

ARTICLE IX—RULES OF ORDER

For all meetings of the entire Association and meetings of the Board of Directors, the following shall be the order of business:

- A. Approval of minutes of the previous meetings.
- B. Reports of officers.
- C. Old business.
- D. New business.
- E. Adjournment.

In all cases not specifically provided for in the By-Laws, *Robert's Rules of Order* shall prevail.

ARTICLE X—FEES

- A. Institutional members' fees shall be \$25 per year for all hospitals or institutions caring for 50 beds or less. Institutional members shall be given one individual membership without further cost to that individual to whom individual membership is assigned. A fee of \$50 a year will be charged for all hospitals or institutions caring for 51 beds through 200 beds. These hospitals and institutions shall be given two individual memberships without further cost to the individuals to whom the memberships are assigned. A fee of \$75 a year will be charged for all hospitals or institutions caring for over 200 beds. These hospitals or institutions shall be given three individual memberships without further cost to the individuals to whom the memberships are assigned.
- B. Individual membership for physicians shall be \$15 per year. All other individual memberships shall be \$3.

ARTICLE XI—AMENDMENTS

The Constitution and By-Laws may be amended at any regular or special meeting. The proposed amendment must be mailed to each voting member at least 30 days before the date of the meeting. An amendment shall become part of these By-Laws by a majority of the two thirds of those voting.

MAG COUNCIL MEETING DECEMBER 7-8, 1957

CHAIRMAN GEORGE R. DILLINGER called the meeting of the Council of the Medical Association of Georgia to order at 2:40 p.m., December 7, 1957 at Morrison's Restaurant, Valdosta, Georgia.

Officers and Councilors present were: W. Bruce Schaefer, Toccoa, President; Lee Howard, Sr., Savannah, President-Elect; Hal M. Davison, Atlanta, Immediate Past President; T. A. Peterson, Savannah, 1st Vice President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; Charles T. Brown, Guyton, 1st District Councilor; George R. Dillinger, Thomasville, 2nd District Councilor; Virgil Williams, Griffin, 4th District

Continued on Page 42

APPLICATION FOR INDIVIDUAL MEMBERSHIP GEORGIA ASSOCIATION OF BLOOD BANKS

1. Name of Applicant _____
2. Name of Blood Bank or Institution with which affiliated: _____

3. Mailing Address: _____
4. Position or Title: _____
5. State nature of interest in Blood Banking: _____

(Signature of Applicant)

Return application with annual fee (\$3.00) for individual membership to Walter Lee Shepard, M.D., Medical College of Georgia, Eugene Talmadge Memorial Hospital, Augusta, Georgia. The annual dues are \$15.00 for physicians and \$3.00 for other individual members, and are renewable each year beginning May 1st.

APPLICATION FOR BLOOD BANK MEMBERSHIP GEORGIA ASSOCIATION OF BLOOD BANKS

1. Name of Blood Bank _____
2. Date Blood Bank was organized _____
3. Names of Directors of Blood Bank _____
4. Is your Blood Bank organized as: (Answer all pertinent sections.)
 - (a) A Corporation _____
 - (b) A part of the Hospital in which it is housed _____
 - (c) A community Blood Bank _____
 - (d) Some other manner (describe fully) _____
5. Is the administrative policy of your Blood Bank determined by your institution? (Use reverse side if necessary).
Yes _____ No _____
If this decided by some other agency? Yes _____ No _____
If the latter, by what agency? _____
6. Number of bloods collected per year _____
7. Is your Blood Bank in sympathy with the Preamble of the Constitution of the Georgia Association of Blood Banks? Yes _____ No _____

Applicant Bank

Mailing Address

By _____
Title

Membership Fees: Hospitals up to 50 beds	\$25.00
Hospitals with 51 to 200 beds	50.00
Hospitals over 200 beds	75.00

Return to: Walter Lee Shepard, M.D., Medical College of Georgia, Eugene Talmadge Memorial Hospital, Augusta, Georgia.

Vice-Councilor, acting for Councilor J. W. Chambers; J. G. McDaniel, Atlanta, 5th District Councilor; Henry H. Tift, Macon, 6th District Councilor; D. Lloyd Wood, Dalton, 7th District Councilor; F. G. Eldridge, Valdosta, 8th District Councilor; Charles R. Andrews, Canton, 9th District Councilor.

Vice-Councilors present included: Ralph W. Fowler, Marietta, 7th District; and Paul T. Scoggins, Commerce, 9th District. Committee Chairmen present included: John P. Heard, Decatur, Public Service Committee; and Lester Rumble, Jr., Atlanta, Crawford W. Long Memorial Committee. Also present was Mr. M. D. Krueger, Executive Secretary; Mr. John F. Kiser, Associate Executive Secretary; and Mr. John D. Arndt, Medicare Administrator.

The Council meeting minutes of September 14-15, 1957 and the Executive Committee of Council meeting minutes of October 24, 1957 and November 17, 1957 were read and approved.

AMA Industrial Health Council Meeting Invitation

It was voted to invite the AMA Industrial Health Council to hold their annual meeting in Atlanta at their discretion in 1959, 1960, or 1961, and that an invitation in the name of the MAG Council, be sent to the Chairman of the AMA Industrial Health Council.

Blood Banks Committee Report

Mr. Krueger presented the following recommendations of the Special Committee on Blood Banks for G. L. Forbes, Jr., Chairman:

"(1) That the Medical Association of Georgia sponsor, promote and endorse the Georgia Association of Blood Banks as the organization through which it wishes to accomplish the following: The establishment of a state-wide organization of blood banking with a clearing house system, and through an educational program to promote adoption of the minimum standards of blood banking approved by MAG in as many blood banks as possible.

"(2) That the Council approve the budget submitted to the Finance Committee so that the Georgia Association of Blood Banks can be supported until it becomes a self-sufficient organization.

"(3) Projected program of the Blood Bank Committee in the immediate future to sponsor a joint meeting with the Georgia Association of Blood Banks and the Georgia State Public Health Department to be held in Atlanta, February 21, 1958.

"(4) That the Medical Association of Georgia sponsor jointly with the Public Health Department the advancement of blood banking in the State of Georgia.

"(5) That the Council appoint the Chairman of the Special Blood Banks Committee as a representative to the Board of Governors of the Georgia Association of Blood Banks."

It was voted to approve these recommendations.

School Child Health Report

Chairman George Dillinger presented a report on the 6th National Conference on Physicians and Schools, Highland Park, Illinois, October 30-November 2, 1957 for the Association representative at that meeting, Thomas C. McPherson. The report emphasized the

importance of the Association's actively undertaking a role in this project. The report also recommended that a school health committee should be formed by the Medical Association of Georgia, and that it should begin to stimulate actively the formation of school health committees in the county medical societies in Georgia. It was voted to approve the report and to appoint this committee.

Industrial Health Committee Report

Mr. Krueger presented a report of the Association Industrial Health Committee for Robert Harbin, Chairman, which recommended that certain equitable changes should be considered in the State of Georgia Workmen's Compensation Act Fee Schedule, and submitted these changes to the Council of the Medical Association of Georgia for approval with the recommendation that these changes be submitted by the Council to the appropriate authority of the Georgia State Board of Workmen's Compensation. It was voted to approve these changes and to submit them to the appropriate authority of the Georgia State Board of Workmen's Compensation.

The Council was then asked to approve a recommendation about the selection of physicians by the patient under the present Workmen's Compensation Laws as submitted by the Industrial Health Committee as follows: "Ask the Council of the Medical Association of Georgia to recognize that this problem exists and to take steps to preserve the patient-physician relationship." It was voted to approve the report, and request the Industrial Health Committee to petition the Georgia Board of Workmen's Compensation to have each employer list several doctors of medicine who are acceptable to them and to disseminate this information to the employee so that employees have some choice of physician in each community, if the patient so requests, in lieu of the present system which may deny free choice of physician to the patient.

Medicare Report

Mr. John Arndt, Medicare Administrator, presented data concerning the administration of the Medicare program in the Headquarters Office. Chris J. McLoughlin then presented a report on the recent AMA Medicare meeting, December 6, Chicago.

General discussion ensued concerning the principles and policies of the Medicare program. An indemnity-type program of rendering Medicare service to dependents of the Armed Forces was fully discussed by Mr. Arndt and members of the Council. It was voted to support Mr. Arndt in negotiating an indemnity-type program for the Medical Association of Georgia, and providing the means of informing the doctors of Georgia of the principles involved in the present program and an indemnity-type program, with funds for this purpose not to exceed \$500.00. Dr. McLoughlin related plans for a National Medicare meeting to be held in Atlanta with those states interested in an indemnity-type Medicare program attending. Dr. McLoughlin said such a meeting was tentatively scheduled for January 11 and 12, 1958, Academy of Medicine, Atlanta, and the purpose of this meeting was approved. A communication from the Macon Pediatric Society addressed to the Georgia Review Board on Medicare was read and discussed by Dr. Henry Tift. After discussion of

this matter, it was referred to the Georgia Review Board.

Finance Committee Report

J. G. McDaniel, Chairman of the Council Committee on Finance, presented the recommendations of the Finance Committee for Council approval of the 1958 Association budget. The budget was fully discussed, and it was voted:

- (1) That an additional \$1,600.00 be budgeted for a weekly health column to be jointly sponsored by the Association's Public Service Committee and Rural Health Committee, with \$800.00 to be added to the Public Health Committee's budget figure of \$1,000 and \$800.00 to be added to the Rural Health Committee's budgeted figure of \$800.
 - (2) That item 23 be added under Committee expenses and titled "January 1958 Medicare Conference" with \$100.00 budgeted for this item.
 - (3) That item 24 be added under Committee expenses and titled "AMA Delegates Meetings" and that \$500.00 be budgeted for this item.
- It was then voted to approve the budget as follows:

	1957	1958	
	Budgeted Income & Disbursements	Actual Income & Disbursements Thru 11-6-57	Proposed Budget For 1958
INCOME			
Income from Dues .	\$57,000.00	\$59,062.50	\$ 92,000.00
Journal Advertising	25,000.00	28,694.63	32,000.00
Fees Exhibitors A.S.	8,750.00	8,575.00	10,000.00
Int. & AMA . . .	2,200.00	2,406.18	2,500.00
	<u>\$92,950.00</u>	<u>\$98,738.31</u>	<u>\$136,500.00</u>
DISBURSEMENTS			
1. Salaries . . .	\$26,675.00	\$18,916.60	\$ 27,600.00
Bonus . . .	—	—	2,000.00
			<u>\$ 29,600.00</u>
2. Fixed Allotments			
Pension			
Payments . . .	\$ 1,200.00	\$ 500.00	\$ 1,200.00
Honorarium			
President . . .	1,000.00	1,000.00	1,000.00
Atty. Retainer .	1,200.00	4,371.82	1,200.00
Special Atty.			
Fees . . .	—	—	3,500.00
Annual Audit .	500.00	500.00	500.00
Cont. F.C.M.S..	1,500.00	1,500.00	1,500.00
Ins. & Bonds			
Pers. . . .	1,000.00	763.82	1,000.00
Woman's			
Auxiliary . .	1,300.00	1,300.00	1,300.00
Better Health Council . .	1,200.00	—	—
	<u>\$ 8,900.00</u>	<u>\$ 9,935.64</u>	<u>\$ 11,200.00</u>
3. Journal Publication			
Salaries . . .	\$ 4,800.00	\$ 4,216.66	\$ 4,500.00
Bonus . . .	—	—	575.00
Exp. to Journal			
Conf. . . .	—	—	300.00
Engraving &			
Cuts	900.00	1,039.71	1,500.00
Editorial Asst. .	150.00	125.00	150.00
Stationery . . .	300.00	38.60	400.00
Postage	500.00	455.59	550.00
Clipping Service	250.00	207.95	250.00
Add: & Supplies	200.00	204.55	250.00
Copyright . . .	50.00	48.00	50.00
Printing	26,000.00	24,530.10	32,000.00
Sales Tax . . .	780.00	734.81	960.00
Sundry	50.00	60.27	75.00
	<u>\$33,980.00</u>	<u>\$31,661.24</u>	<u>\$ 41,560.00</u>

4. Headquarters Expense			
Travel	\$ 4,000.00	\$ 1,981.59	\$ 4,000.00
AMA Travel;			
Del; Sec;			
Exec. Sec. . .	2,000.00	1,000.00	3,000.00
Meetings . . .	500.00	485.92	750.00
Stat. Print.			
& Sup. . . .	1,500.00	1,497.33	1,800.00
Postage	1,500.00	1,084.34	1,500.00
Tel. & Tel. . .	2,500.00	1,949.45	2,500.00
Depreciation .	500.00	—	750.00
Office Maint. .	500.00	253.29	600.00
Dues & Sub. .	200.00	115.00	200.00
Janitor Serv. &			
Gratui. . . .	300.00	225.00	400.00
Payroll &			
Unemp. Tax . .	1,400.00	1,110.26	1,500.00
Sundry	500.00	245.24	500.00
	<u>\$15,400.00</u>	<u>\$ 9,947.43</u>	<u>\$ 17,500.00</u>
5. Annual Session .	\$10,000.00	\$10,999.30	\$ 12,000.00
6. Committee Expenses			
1. Rural Health	\$ 350.00	\$ 357.06	\$ 1,600.00
2. Medical			
Defense	500.00	3,175.15	3,500.00
3. Legislation .	1,400.00	1,443.39	2,150.00
4. Maternal			
Welfare	200.00	27.45	275.00
5. Industrial			
Health	100.00	100.00	—
6. Public			
Service	1,000.00	401.36	1,800.00
7. Ins. &			
Economics	300.00	4.01	400.00
8. Awards . . .	100.00	123.51	1,100.00
9. AMEF	1000.0	79.41	—
10. Veterans			
Affairs	150.00	—	250.00
11. Hosp.			
Relations . . .	150.00	118.91	1,000.00
12. Hist. &			
Vital Stat.	—	100.00	200.00
13. Med. Civil			
Prep. . . .	50.00	—	50.00
14. Blood Banks	50.00	—	720.00
15. Mental			
Health	275.00	573.79	200.00
16. Crawford W.			
Long	100.00	234.24	1,000.00
17. Medical Edu.	100.00	100.00	—
18. Ministerial			
Liaison	—	—	300.00
19. Tax Deduc.			
Ind. Care . . .	—	—	50.00
20. Med. School			
Course	—	—	250.00
21. Dist. Serv.			
Award	—	—	100.00
22. Physician-			
Lawyer			
Liaison	—	—	500.00
23. Medicare			
Conf. . . .	—	—	100.00
24. AMA Del.			
Meet. . . .	—	—	500.00
	<u>\$ 4,925.00</u>	<u>\$ 6,838.28</u>	<u>\$ 15,445.00</u>
Equipment . . .	\$ —	\$ 3,965.27	\$ 500.00
Travel Phy. &			
S. Conf. . . .	—	31.92	—
SS Ballot &			
Pamphlets . . .	—	540.95	—
Asiatic Flu			
Postage	—	34.72	—
	<u>—</u>	<u>\$ 4,572.84</u>	<u>\$ 500.00</u>
Total			
Disbursements .	\$99,880.00	\$92,871.33	\$128,405.00
Contingent Fund			
Deficit	6,930.00	—	—
Bank Balance . .	—	\$10,781.54	—

1958 Contingent Fund	—	—	\$ 2,800.00
1958 Reserve Fund	—	—	\$ 5,295.00

Physician-Lawyer Code of Cooperation

Hal M. Davison, Chairman of the Special Committee on Physician-Lawyer Liaison, reported on a November 3, 1957 Macon meeting of his Committee with the officials of the Georgia Bar Association. The purpose of this meeting was to draft an interprofessional code of the Medical Association of Georgia and the Georgia Bar Association. Dr. Davison outlined and read a draft of this code, and this report was accepted and approved. It was stated that this code would be presented to the MAG House of Delegates as a resolution by this Committee.

Georgia Radiological Society Resolution

Chris J. McLoughlin presented correspondence from J. Frank Walker, Chairman of the Georgia Radiological Society Committee on Radiologic Safety. The communication requested: "To enlist your cooperation regarding an action taken by the Georgia Radiological Society in formal session in Valdosta, Georgia, October 26, 1957. This body voted to recommend the appointment of a special advisory committee to the State of Georgia Department of Public Health."

This correspondence had been discussed by the Executive Committee of Council which recommended that the Council approve the request of the Georgia Radiological Society and appoint a Committee of Radiologists. It was voted to approve the resolution and that a Committee on Radiologic Safety be appointed by the President to serve as a Liaison Committee to the Georgia Department of Public Safety.

Institution-Physician Relations Committee Report

F. G. Eldridge, Chairman of the Council Institution-Physician Relations Committee, presented a declaration of ethical standards concerning the specialties of Radiology, Pathology, Anesthesiology, and Physical Medicine. Dr. Eldridge read the original policy as drawn up by his Committee and reported on the subsequent action of his Committee in revoicing this statement of ethical standards which was read to Council as Follows:

"(1) Adequate service guaranteed by physicians to satisfy the needs and requirements of the members of the medical staff of the hospital.

"(2) Charge for services rendered by these physicians must be in the name of the physician or physicians rendering the service.

"(3) That no employer-employee relationship exist between the hospital and the physician as such relationship is unethical and illegal.

"(4) Any arrangements made with the hospital by the physician should be of such a nature as to require payment for his professional services by Blue Shield rather than Blue Cross and this is strongly recommended.

"(5) These basic principles of medical ethics so stated should apply to all hospitals admitting 'pay patients' regardless of size and to all physicians practicing in the State of Georgia."

It was voted to approve this revised declaration of ethical standards.

Medical School Course Report

Chris J. McLoughlin, Chairman of the Council Medical School Course Committee, reported on the activity of that Committee. He stated that ten lectures on the "Art of the Practice of Medicine" were scheduled at the Medical College of Georgia beginning January 25, 1958, and that six lectures on the "Art of the Practice of Medicine" were scheduled to be held at Emory University School of Medicine beginning January 25, 1958. Dr. McLoughlin further reported that a Senior Day would be held as a final windup of the courses, and that Mead Johnson Pharmaceutical Company would print booklets containing these lectures for presentation to the students at the end of the course and aid in participating Senior Day Program. It was suggested that a copy of the program and the booklet of lectures be mailed to Council members for their information.

Councilor Apportionment and Redistricting Report

Mr. Krueger reported for Thomas W. Goodwin, Chairman of the Council Special Committee on Councilor Apportionment and Redistricting. Mr. Krueger presented a map showing 12 councilor districts revising the present 10 councilor districts as defined in the Constitution and By-Laws. He pointed out this change would then increase the number of councilors from 10 to 12 representing districts and that county societies having 100 or more active members would elect their own councilor to represent them under this plan. As stated then, there would be 12 councilors from the 12 new councilor districts and five councilors from the societies having 100 or more members, which are: Fulton (Atlanta); Bibb (Macon); Muscogee (Columbus); Richmond (Augusta); and Georgia Medical Society (Savannah). Furthermore, any society having 100 or more members will elect a councilor direct and for each additional 500 active members on their rolls shall elect an additional councilor. This would bring the



COUNCIL MEETING IN PROGRESS—Charles R. Andrews, Canton, 9th District Councilor, standing, addresses the MAG Council in session December 7 and 8 in Valdosta.

number of councilors to 18.

Constitution and By-Laws Committee Report

Mr. Krueger presented for Dr. Goodwin, Chairman of the Association Constitution and By-Laws Committee, a suggested additional section under Membership titled "Jurisdiction" that would provide that physicians having their predominant practice in the area of a county medical society jurisdiction join that particular county society.

It was recommended that this jurisdictional matter be reviewed by the Association Special Attorney and then referred to the Constitution and By-Laws Committee for presentation to the House of Delegates.

Also presented was a proposed reorganization of the Public Health Committee.

This report was approved with the recommendation that it be sent to the Constitution and By-Laws Committee for presentation to the House of Delegates.

C. W. Long Memorial Report

Lester Rumble, Jr., Chairman of the Association Crawford W. Long Memorial Committee, reviewed the Committee's progress to date and requested a scientific exhibit at the 1958 Annual Session to inform the members about the Crawford W. Long Memorial Museum at Jefferson, Georgia. Dr. Rumble reported on future proposed plans, and it was voted to approve and commend Dr. Rumble's activity on the Crawford W. Long Memorial Museum and so present to the House of Delegates.

Distinguished Service Award Committee Report

Mr. Krueger reported for David Henry Poer, Chairman of the Council Distinguished Service Award Committee, who recommended as follows:

"It is recommended that a suitable award may be presented annually to a member of the Medical Association of Georgia for distinguished and meritorious services which reflect honor and credit to this Association and to the Medical Profession, subject to the following rules and regulations:

- (1) Recommendations for this honor may be made by any component society or by a member in good standing, or by the Selections Committee.
- (2) Recommendations shall be made to the President of the Association, who shall act as Chairman of the Selections Committee.
- (3) Other members of the Selections Committee shall be secretly, appointed annually by the President with representatives from each Councilor District recommended by the Councilor.
- (4) The Selections Committee shall meet during or near the time of the Annual Session, and announcement of the recipient of this honor shall be made by the President during a general session of the members of the Association.
- (5) This Committee shall provide a suitable certificate or trophy not to exceed \$100.00 in value, to be presented to the recipient by the President at the time of the announcement."

It was voted to approve this report and institute this award for 1958.

Talmadge Hospital Policy Report

Chris J. McLoughlin, Secretary, reported on the activity with the Medical College of Georgia with the



NEW COUNCIL MEMBER—Virgil Williams, Griffin, right, receives congratulations on being appointed Vice Councilor from the Fourth District. Bruce Schaefer, President, left, and George Dillinger, Chairman of Council, center, are doing the congratulating. Dr. Williams attended his first Council meeting at Valdosta, December 7 and 8.

Richmond County Medical Society in regard to the Talmadge Memorial Hospital-Medical College of Georgia policy problems. Dr. McLoughlin reported that the Medical College of Georgia President Edgar Pund, had requested a joint AMA Committee to review the situation and that Richmond County Medical Society had made a similar request. He informed Council that the Association had requested this same joint committee, and it was voted that Council affirm the MAG request to the AMA Board of Trustees for the appointment of an AMA Joint Committee to investigate and arbitrate the problem. Dr. McLoughlin informed the Council that such a committee was being appointed. The matter was discussed and no other action required.

Legislative Committee Report

Mr. Kiser reported for J. Frank Walker, Chairman of the Association Legislative Committee, on the committee's meetings to date and on its activity. It was voted to send a letter in the name of the Council to Dr. Edgar Pund, President of the Medical College of Georgia, and Dr. Thomas Goodwin, expressing the appreciation of the Council for their recent cooperation with the State Legislative Committee in scheduling and conducting a tour of the Medical College of Georgia.

Social Security Tellers Committee Report

D. Lloyd Wood, Chairman of the Council Social Security Tellers Committee, reported on the results of the recent MAG all-active member poll results. These results were, as of this date, 496 in favor of compulsory social security and 537 against compulsory social security. The poll was accepted for information, and MAG policy set by this vote is against "compulsory social security," as instructed by the 1958 House of Delegates, and further that this be so reported to the AMA.

State Board Correspondence

Mr. Kiser reported on certain communications received from the State Board of Medical Examiners, State Board of Health, etc. These communications related to the Association's Secretary attending those meetings, and being furnished minutes of the meetings of those bodies. It was recommended that a letter be

sent to these State Boards inviting their members to attend any Council meeting with the privilege of the floor, and the dates of Council meetings to be made available to the members of these State Boards.

Additional Hospital Relations Committee Appointments

W. Bruce Schaefer, President, asked approval of the following additional appointments made by him to the Association Hospital Relations Committee: W. L. Pomeroy, Waycross; Howard C. Derrick, Jr., Lafayette; P. W. Warga, Athens; Henry H. Tift, Macon; Frank G. Eldridge, Valdosta; A. B. Conger, Columbus; Fred H. Simonton, Chickamauga; and J. M. Byne, Waynesboro. These appointments were approved.

AMA Interim Session, Philadelphia, December 3-6, 1957

W. Bruce Schaefer, President, reported on the American Medical Association Interim Session held December 3-6, 1957, Philadelphia, Pennsylvania. The report was accepted for information, and the policies adopted at this session were recommended as MAG policy.

Unfinished Business

VA Fee Schedule: Chris J. McLoughlin, Secretary, asked that the Association seek approval of 13 items in the VA Fee Schedule revision that were not accepted by the Government at the time of the September, 1957 negotiation on this same fee schedule. It was moved that the Council request revision of these items in the VA Fee Schedule as previously submitted to the Veterans Administration.

Interprofessional Council Medicare: Chris McLoughlin, Secretary, brought to the attention of Council the fact that the Interprofessional Council had requested the Association to send a letter to the Government approving the inclusion of pharmacists under the Medicare Plan so that they might bill and be paid for dispensing medications rather than fees for this being paid to a physician. By general agreement, Council approved and recommended that a letter be sent to the Department of Defense and others informing them of this action.

Better Business Bureau: Chris J. McLoughlin, Secretary, gave information concerning the four Better Business Bureaus of Georgia, and on motion it was voted that the Association become a member of the Atlanta Better Business Bureau.

New Business

VFW Liaison Committee: It was voted to appoint a special Association Liaison Committee, with the appointment to be made by the President.

Georgia Commission on Nursing: W. Bruce Schaefer, President, explained the Georgia Commission on Nursing as initiated by the Governor of the State of Georgia, and it was voted that the Council recognize that there is a vital need for nursing care to be rendered patients and that Council request Dr. Schaefer present

this opinion to the Georgia Nursing Commission.

Date and Site of March Council Meeting: The Council appreciatively accepted the invitation of the Muscogee County Medical Society to hold the March meeting of Council in Columbus, Georgia, March 15-16, 1958.

January Executive Committee of Council Meeting: January 26, 1958 was set as the date for the January Executive Committee of Council meeting in Atlanta.

February Executive Committee of Council Meeting: Lee Howard, Sr., President-Elect, invited the Executive Committee to meet in Savannah in February, and it was moved that the Executive Committee of Council accept this invitation with the date to be set by Dr. Howard.

There being no further business, the meeting was adjourned.

ANNOUNCEMENTS

Atlanta Graduate Medical Assembly—February 17-19, 1958, Atlanta Biltmore Hotel, Atlanta, Georgia. Each day a different specialty. Courses offered in Internal Medicine, Neuropsychiatry, Neurological Surgery, Cardiovascular Surgery, Obstetrics, Gynecology, Pediatrics. Registration fee: \$10.00. AAGP credit 15 hours category I.

Joint Program of the Atlanta Society of Pathologists, Georgia Association of Pathologists, and the Southeastern Region of the College of American Pathologist—March 29-30, Academy of Medicine, Fulton County Medical Society, Atlanta, Ga. March 29 will be devoted to topics of interest to the Pathologist in Communicable Diseases including workshops and various diseases. March 30 will be devoted to a seminar on bone diseases.

First Oklahoma Colloquy on Advances in Medicine—February 6-8, 1958. The program will be devoted to problems on Fluid, Electrolyte, and Nutritional Balance. Nine nationally prominent investigators will participate and present the results of original work from their laboratories. Registration open to all physicians. Registration fee: \$25.00.

Postgraduate Course on Diseases of the Chest—Sponsored by the Council on Postgraduate Medical Education of the American College of Chest Physicians. Grady Memorial Hospital, Atlanta, Georgia, March 10-14, 1958. The most recent advances in the diagnosis of chest diseases—medical and surgical—will be presented. Tuition fee: \$75.00.

DEATHS

MARVIN ALBIN ACREE, 72, died at his residence in Sonoraville on December 4. Dr. Acree was born in Hill City and graduated from the University of Georgia School of Medicine in 1912. He had practiced medicine in Gordon County for 43 years and had retired from active practice two years ago.

Dr. Acree was an ordained minister of the Sonora-

ville Baptist Church, a Mason, a member of the Sonora-ville Lodge and a Royal Arch Mason. He was a member of the American Medical Association, the Gordon County Medical Society, and the Medical Association of Georgia.

Survivors include his wife, the former Miss Webbie Penelope Hudgins, one daughter, and nine sons.

CHARLES EDWARD LAWRENCE, Atlanta anesthesiologist, died unexpectedly on November 16. Dr. Lawrence was a graduate of the Atlanta Medical College and served his internship in Macon at Middle Georgia Hospital.

He was on the staff of the Crawford Long Hospital and maintained offices for private practice in the Candler Building.

Dr. Lawrence was a Mason, a Shriner, and a member of the Druid Hills Baptist Church. During World War I, he was with the Emory Medical Unit overseas.

Surviving are his wife; two daughters, Mrs. Lawrence Centers, Atlanta, and Mrs. W. R. Harrell, Macon; five sisters; four brothers; and two grandsons.

W. C. McGEARY, Madison, died last November in an Atlanta hospital following a short illness.

A graduate of Emory Medical College in 1915, Dr. McGeary first practiced in Turnesville, then came to Madison in 1917.

He was a member of Phi Beta Pi medical fraternity, an elder in the Presbyterian Church, a member of the Atlanta Athletic Club, the Eagle Club, the Athens Elk Lodge, and the Oconee Valley Medical Society.

Dr. McGeary is survived by his wife; one son, Dr. W. C. McGeary, Jr.; a brother, Floyd McGeary, Kittanning, Pa.; and a sister, Mrs. Herbert Coldwell, Ford City, Pa.

LINTON SMITH, 76, retired Atlanta general practitioner, died December 10, after an illness of several years.

A graduate of the old Atlanta Medical College, Dr. Smith was a member of the Fulton County Medical Society and was on the staffs of the Crawford Long and the Georgia Baptist hospitals.

He was a member of the Episcopal Church of the Epiphany and a member of the Pythagoras Lodge, F&AM.

Survivors include his wife, the former Edith Farlinger of Atlanta; three daughters, Mrs. W. E. McMaster, New Orleans; Mrs. D. A. Isley, New York; Mrs. G. N. Wagnon, Dillingham, Alaska; and one brother, Capt. C. D. Smith, New Orleans, La.

SOCIETIES

Milford B. Hatcher, Macon physician, was the featured speaker at a meeting of the **BALDWIN COUNTY MEDICAL SOCIETY**. Dr. Hatcher's topic was "Blood Transfusions."

At the fall meeting of the **THIRD DISTRICT MEDICAL SOCIETY**, J. C. Patterson, Cuthbert, presented a paper on "Hysterectomies" and R. C. Pendergrass, Americus, read a paper entitled "Tumors of the Colon." At the same meeting Wray J. Tomlinson, Columbus, and Frank A. Wilson, Leslie, conducted a clinicopathological discussion. Newly-elected officers of the Third District Society include Dave Berman, Columbus,

president; Maurice F. Arnold, Hawkinsville, vice-president; Frank A. Wilson, secretary-treasurer; and W. G. Elliott, Cuthbert, and Luther H. Wolff, Columbus, councilor and vice-councilor respectively.

The **BARTOW COUNTY MEDICAL SOCIETY** have elected the following Cartersville physicians as officers for the coming year: J. W. Stanford, president; H. B. Bradford, vice-president; Virginia H. Maley, secretary-treasurer; W. B. Quillian, Jr., delegate; and W. B. Dillard, alternate delegate.

Champ Lyons, professor of surgery at the University of Alabama, and Vernon Knight, associate professor of medicine at Vanderbilt University were featured speakers at a meeting of the **SIXTH DISTRICT MEDICAL SOCIETY** in Macon. Also a part of the same scientific program was a panel discussion on medical versus surgical jaundice.

James H. Byram, Atlanta, was chosen president-elect of the **FULTON COUNTY MEDICAL SOCIETY** at a recent meeting of the society.

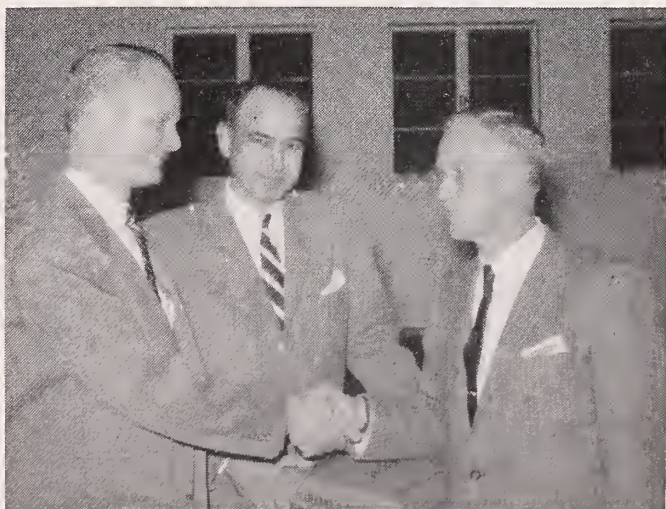
The **GEORGIA MEDICAL SOCIETY** met with the Savannah Bar Association recently for the second in a series of medico-legal forums. At the meeting a film was shown depicting a trial whose outcome depended upon the medical testimony.

William Moretz, professor of surgery at the Medical College of Georgia, Augusta, discussed "Recent Trends in Abdominal Surgery" at a meeting of the **GEORGIA MEDICAL SOCIETY**.

William A. Wilkes, Augusta, was elected president of the **RICHMOND COUNTY MEDICAL SOCIETY**. Other officers include William A. Fuller, Augusta, president-elect; A. J. Waters, vice-president; and Theodore Everett, secretary-treasurer.

C. Ashley Bird, Jacksonville, Florida, and J. Willis Hurst, Atlanta, were the principal speakers at the December meeting of the **THOMAS-BROOKS MEDICAL SOCIETY**. Dr. Bird discussed "Neurosurgical Treatment of Parkinsonism" and Dr. Hurst's topic was "Remember Your Stethoscope."

Walter E. Lee, Waycross, was elected president of



MERRILL SPEAKS AT HALL COUNTY MEETING: Arthur J. Merrill, Atlanta, right, is thanked for his talk at the December meeting of the Hall County Medical Society by Hamil Murray, Gainesville, Secretary, left, and Martin Smith, Gainesville, center, President. Dr. Merrill talked on "Chronic Pyelonephritis." He was presented with a box of frozen chickens by Dr. Smith. Following the program Dr. Rafe Banks, Gainesville, was elected President succeeding Dr. Smith.

SOCIETIES / Continued

the WARE COUNTY MEDICAL SOCIETY at a recent meeting of the group. Katherine Hendry, Blackshear, was named vice-president; Arthur M. Knight, Waycross, secretary-treasurer; and Vilda Shuman, Waycross, censor. At this same meeting a film on "Disorders of the Heart" was presented.

Joseph A. Hertell, Atlanta, area medical officer and director of the blood program of the American Red Cross, discussed the management of mass casualties in the event of a major disaster at a meeting of the WHITFIELD COUNTY MEDICAL SOCIETY.

PERSONALS

Second District

H. B. BAXLEY, Donalsonville, was the principal speaker at a meeting of the Blakely Lions Club.

T. E. DUPREE, Bainbridge, was the guest speaker at a meeting of the Woman's Auxiliary to the Decatur-Seminole Medical Society.

PAUL LUCAS, Tifton physician, who has made a study of astronomy, atomic energy, and other related subjects as a hobby, described the operations of the International Geophysical Year and touched on the atomic and satellite problems at a meeting at the Tifton Kiwanis Club recently.

ROBERT A. MATTHEWS, Albany Anesthesiologist and member of the Phoebe Putney Hospital staff, has been named a Diplomate of the American Board of Anesthesiology.

Third District

JACK HIRSCH, Columbus, discussed the differences between Asian and the other types of influenza at a meeting of the Columbus Optimist Club recently.

JACK C. HUGHSTON, Columbus, spoke on a school for special education combining the Columbus agencies servicing the exceptional at a meeting of the Muscogee County Medical Auxiliary.

LEONARD T. MAHOLICK, Columbus, has recently returned from Atlantic City, N. J., where he attended the annual conference of the National Mental Hygiene Association as a delegate from Georgia. Dr. Maholick also spoke to the Lay Society of Diabetes recently on the importance of the mental aspects of diabetes.

C. P. SAVAGE, SR., Montezuma, has been named a member of the State Board of Medical Examiners. Dr. Savage is a former president of the Third District Medical Society, has been a councilman in Montezuma for the past 15 years, and is a deacon of the Montezuma Baptist Church.

Fourth District

The people of Molena and Pike county paid tribute to their only practicing physician recently at "DR. J. H. GRUBBS' DAY." The 73 year old Molena physician received notes, letters, and poems from two generations of patients as well as an inscribed bronze plaque.

Fifth District

ALFRED AGRIN, Atlanta psychiatrist, was the principal speaker at the National Council on Alcoholism.

An article written by HAL M. DAVISON, Atlanta, on the subject of "Allergy—Its Diagnosis and Treatment" was featured in the Christmas issue of *Georgia Magazine*.

G. LESTER FORBES, JR., Atlanta pathologist, was guest speaker at the December meeting of the Atlanta Society of Medical Technologists.

JAMES T. KING, Atlanta, recently spoke before the New England Otolaryngological Society in Boston, Massachusetts.

BERNARD S. LIPMAN, Atlanta, recently passed examination and has been officially certified by the Sub-specialty Board of Cardio-Vascular Diseases.

MORGAN B. RAIFORD, Atlanta ophthalmologist, recently spoke before the Cartersville Lions Club on the causes of eye trouble and the methods used today in combatting defective vision.

J. ELLIOTT SCARBOROUGH, Atlanta, was guest speaker at a cancer forum sponsored by the Ware County Unit in Waycross.

Sixth District

FRED J. COLEMAN, Dublin, has been appointed chairman of District Six for the 1958 Easter Seal Appeal which will begin March 6.

W. DEVEREAUX JARRATT, Macon, has recently been elected president of the staff at Parkview Hospital. He succeeds J. L. KING, SR. Other new officers include T. H. WILLIAMS, vice-president, and DAVID S. MANN, secretary.

Seventh District

Three Rome physicians were honored recently by the Georgia Tuberculosis Association for 25 years service in the tuberculosis field. Receiving medallions for their work in this area were WILLIAM P. HARBIN, H. E. CROW, and FRANK A. BLALOCK.

LUKE G. GARRETT, JR., who was recently elected mayor of the city of Austell was the guest speaker at the Austell Post No. 54 American Legion Christmas dinner.

THOMAS E. REEVE, JR., Carrollton, has been elected chief of staff of Tanner Memorial Hospital. Also elected were D. S. REESE, vice-chief, and FRANCIS M. PARKS, secretary.

Eighth District

HERBERT KIRCHMAN, Brunswick, announces the removal of his offices from 502½ G Street to the New Hayes Building, 403 G Street.

FRANK B. MITCHELL, Brunswick, has been named president and chief of the medical staff of the Brunswick Hospital. CLYDE A. WILSON was elected vice-president and BERT H. ELLIS, secretary.

Ninth District

M. D. PITTARD, Toccoa, has been appointed

Stephens County Campaign Chairman for the 1958 March against Muscular Dystrophy.

Dr. and Mrs. W. BRUCE SCHAEFER have recently returned from Philadelphia where Dr. Schaefer attended a meeting of the American Medical Association.

W. B. SCHAEFER, Toccoa, was the principal speaker at a meeting of the Toccoa P.T.A. Dr. Schaefer's talk was based on the general subject of "Health."

PAUL T. SCOGGINS, Commerce, has been appointed a member of the Georgia State Board of Medical Examiners.

C. W. WHITWORTH, Gainesville eye, ear, nose, and throat specialist, spoke to members of the Clarkesville Lions Club recently on the subject of sight conservation.

Tenth District

THOMAS FINDLEY, Augusta, presented a paper, "A Simplified Scheme for Recognition and Treatment of Electrolyte Disturbances," before the staff members of the Veterans Administration Hospital in Dublin.

ROBERT G. GREENBLATT, Augusta, recently presented a paper to the Medical Society of Montreal on the subject of "Microcystic Diseases of the Ovaries."

RICHARD TORPIN, Augusta, gave a review of the highlights of his recent trip abroad at a meeting of the Columbia Rotary Club.

HOKE WAMMOCK, Augusta, recently addressed students of Langford High School on the subject of cancer and its relation to smoking and drinking.

Physicians Newly Licensed in Georgia

Benjamin Alfred Addison
2606 Canary Ave., Brunswick, Ga.
George Whitaker Allen
950 East 59th St., Chicago 37, Ill.
Otho Preston Allen
917 2nd National Bldg., Atkon, Ohio
William Harvey Cabaniss, Jr.
765 E. Milledge, Athens, Ga.
John Richard Castle
231 E. Ponce de Leon Ave., Decatur, Ga.
John Francis Dillon
2845 Lombardy Court, Augusta, Ga.
Paul Theodore Erickson
109 Parkwood Lane, Decatur, Ga.
Daniel Herschel Framm
1415 Country Lane, N.E., Atlanta, Ga.
Robert Henry Franch
69 Butler St., S.E., Atlanta, Ga.
Benjamin Thomas Galloway, Jr.
1416 Magnolia Ave., Brunswick, Ga.
Alan Godwin
781 Golden Ave., Secaucus, N. J.
William Richard Greco
3200 Kemble Ave., Brunswick, Ga.
Theodore Joseph Haywood
2601 Parkwood Dr., Brunswick, Ga.
Sara Ann Lippard Hoyt
Mount Berry, Ga.
Paul Herbert Jahn
Battey State Hosp., Rome, Ga.
Lawrie Emmett Jordan, Jr.
21 Jefferson Pr., Athens, Ga.
Gordon Evans Madge
Medical College of Georgia, Augusta, Ga.
Herschel Ulrie Martin
Hamilton Mem. Co. Hosp., Dalton, Ga.
Christian Rupert Moorhead
2898 N.W. 7th St., Ft. Lauderdale, Fla.
Jimmie Whiteside Morgan
215 Doctors Bldg., Atlanta, Ga.
John Robert Nelson
Thompson Clinic, 401 High St., Chattahoochee, Fla.

George James Pastorius
5109 Abercorn St., Savannah, Ga.
Edward Matthew Rehak
3195 Paces Ferry Pl., Atlanta, Ga.
Robert Allen Reich
Medical College of Georgia, Augusta, Ga.
Daniel Roberts
487 Boulevard, N.E., Atlanta, Ga.
Nan Elizabeth Robinson
Harbin Clinic, Rome, Ga.
Marion Thomas Rosser
304 Hollis Dr., Albany, Ga.
Carl Everett Shroat
3312 Gail Dr., Columbus, Ga.
Wade Henry Shuford
1203 N. Gregson St., Durham, N. C.
Joseph Hardin Stickley
509 Doctors Bldg., Chattanooga, Tenn.
Bernard Henry St. Raymond
968 Wilson Dr., New Orleans, La.
DeVerl T. Strickler, Jr.
Tallapoosa, Ga.
Frances Elizabeth Valasek
305 E. Ponce de Leon Ave., Apt. B-3, Decatur, Ga.
Victor Clarence Vaughan, III
Medical College of Georgia, Augusta, Ga.
James Heiskell Venable
1523 Hilton Ave., Columbus, Ga.
Jay Herbert West
3022 Cardinal Dr., Augusta, Ga.
David Wetherby
Medical Center, Columbus, Ga.
John M. Wilkins
Box 904, Athens, Ga.
William Joseph Wilson
3200 Bass St., Brunswick, Ga.
Frederick Langley Palmer
507 East Conyers St., Covington, Ga.
Henry George Palmer, Jr.
515 Hardendorf Ave., N.E., Atlanta, Ga.
Fred Eugene Park
919 Michigan Ave., Miami Beach, Fla.

PHYSICIANS NEWLY LICENSED IN GEORGIA / Continued

- Aaron Martin Perlman
1572 N.W. 2nd St., Miami, Fla.
- Arvid John Peterson, Jr.
Duval Medical Center, Jacksonville, Fla.
- Pete Nick Poolos, Jr.
1024 Williams Mill Rd., N.E., Atlanta 9, Ga.
- Francis Shingler Pooser
1152 Circle Dr., Lake Wales, Fla.
- Addison Willis Pope
2300 Koko Lane, Baltimore 16, Md.
- James Edward Pruett
1120 Los Angeles Ave., N.E., Atlanta, Ga.
- Julius Pryor, Jr.
667 W. Jeff Davis Ave., Montgomery 8, Ala.
- William Warren Purks, Jr.
820 Peachtree Dr., Columbus, Ga.
- Arthur Radin
6240 S. W. 29th St., Miami, Fla.
- William Chalmers Rape
306 Anderson St., New Smyrna Beach, Fla.
- David Seeberry Reed
231 East 43rd St., Los Angeles 11, Calif.
- James Milton Richardson
20 Cross St., Englewood, N. J.
- Don Rowland Roberts, Jr.
1801 Macon Ave., Brunswick, Ga.
- Charles Glore Rogers
Box 1281, Emory University, Ga.
- Robert Lee Rogers, Jr.
127 Academy St., Gainesville, Ga.
- David Henry Rozier
Jeffersonville, Ga.
- John Alfred Rush, Jr.
847 Greenwood Ave., N. E., Atlanta, Ga.
- Cecil Mallon Sanders
615 Martha Lane, Cedartown, Ga.
- James Winston Sapp, Jr.
5901 East 7th St., Long Beach 4, Calif.
- Oakley Henry Saunders
2014 N. Pulaski St., Baltimore, Md.
- George Washington Sciple
1511 Lander St., Seattle, Wash.
- Lucius Clyde Sheehan, Jr.
2685 Cherokee Ave., Macon, Ga.
- Flora Hicks Sheffield
Clarksville, Ga.
- Harvey Lee Simpson, Jr.
805 Cordele Rd., Sylvester, Ga.
- Harry Edward Sims
P. O. Box 631, LaGrange, Ga.
- Gary Lee Singleton
178 Fayette St., Jonesboro, Ga.
- Hugh Franklin Smisson, Jr.
316 College St., Fort Valley, Ga.
- Robert Boulware Smith
982 Myrtle St., N.E., Atlanta, Ga.
- Margaret Mary Smotrilla
1145 N. W. 3rd St., Miami, Fla.
- Wesley LaMarr Southerland
1032 N. W. 15th St., Miami, Fla.
- Robert Juniper Starling
P. O. Box 463, Ray City, Ga.
- Bruce Saul Steir
1325 Meridian Ave., Miami Beach, Fla.
- John Raabe Stiefel
1559 Johnson Rd., N. E., Atlanta, Ga.
- Lyle L. Stones
Box 633, Emory University, Ga.
- James Stevens Stout
c/o Office of the Registrar Medical College of Ga.
- Viola Nelle Strozier
Box No. 303, Oxford, Ga.
- Rex Elliott Stubbs
Pembroke, Ga.
- William Armour Talbot
2334 First Ave., N. E., Atlanta 17, Ga.
- Joseph LeConte Talley, Jr.
3122 Walton Way, Augusta, Ga.
- George Ernest Terezakis
1600 E. Marks St., Orlando, Fla.
- Frank Friar Thompson, Jr.
Lumpkin, Ga.
- Ralph Allen Tillman
Rt. 2, Adel, Ga.
- Harry Corbett Tindall
2544 Peachtree Rd., Atlanta, Ga.
- Stanley Craig Topple
26 Berkeley Rd., Avondale Estates, Ga.
- Richard Jackson Turner
Box 135, Franklin Springs, Ga.
- John Philip Wahle, Jr.
420 East Rich, DeLand, Fla.
- William Leslie Walls
5760 S. W. 12th St., Miami, Fla.
- Myron Hinton Watkins
235 Griffin, N. W., Atlanta, Ga.
- Stephen Edward Watts
2323 South Blvd., Dallas, Texas
- Howard Warner Webb
536 Clifton Rd., N. E., Atlanta, Ga.
- Robert Lelius Wells, Jr.
4300 Hermance Dr., Apt No. 1, Atlanta 19, Ga.
- Sarah Lou Wells
3200 N. W. 87th St., Miami 47, Fla.
- George Berrien Wheeler, III
Marlow, Ga.
- Robert Campbell White
20 W. Lee St., Pensacola, Fla.
- Patricia Bryan Wilber
10 16th St., N. E., Atlanta 9, Ga.
- Albert Harrison Wilkinson, Jr.
1555 Shoup Court, Apt. 2, Decatur, Ga.
- Theodore Martin Wolff
P. O. Box 888, Emory University, Ga.
- John Roger Woodard
362 Elm St., Jesup, Ga.
- Otis Jack Woodard, Jr.
1604 Murray Ave., Tifton, Ga.
- Anne Carolyn Roof Yobs
Apt. 156, Bldg. 17, 251 10th St., N. W., Atlanta 13, Ga.
- Nardo Zaias
1136 Collins Ave., Miami Beach, Fla.
- Alfred Marvin Zimmerman
1303 Oakdale Rd., N. E., Atlanta, Ga.

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Edgar Woody, Jr., M.D.

MANAGING EDITOR
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Journal OF THE MEDICAL ASSOCIATION OF GEORGIA

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COVER

The dedicated nurse on this month's cover is Miss Ruby Falls of the Georgian Clinic. She is Director of the Nursing Service of the Georgia State Rehabilitation Center in Atlanta, which is under the Georgia State Commission on Alcoholism.

This photograph by Ted F. Leigh, M.D., won a national award recently.

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The Executive Secretary's

LETTER

The Event: 1958 Annual Session of the Medical Association of Georgia

The Date: April 27, 28, 29 and 30, 1958

The Place: Macon Auditorium, Macon, Georgia

Mark it on your calendar—Make your room reservations—Make It Macon In '58 for the top medical meeting in Georgia. Count on attending the *104th Annual Session of the Medical Association of Georgia. Hear 53 scientific papers presented by the nation's outstanding medical authorities. The Association, in conjunction with 17 Georgia Specialty Societies (including the General Practitioners) has scheduled 10 section meetings, two special lectureships, two general sessions, and two House of Delegates meetings. Luncheons, dinners, and socials have been arranged and Alumni Dinners are also planned. Enjoy the fellowship of your colleagues in the traditional atmosphere of mid-Georgia hospitality.

GUEST SPEAKERS FROM OVER THE NATION

● Pediatrics

William A. Silverman, M.D.
New York City

● Radiology

John A. Campbell, M.D.
Indianapolis, Ind.

● Orthopedics

Frank H. Stelling, M.D.
Greenville, S. C.

● Obstetrics & Gynecology

William F. Mengert, M.D.
Chicago, Ill.

● Pathology

James Griffiths, M.D.
Miami, Fla.

● Chest

Paul T. Chapman, M.D.
Detroit, Mich.

● Isotonic Medicine & Surgery

James R. Maxfield, Jr., M.D.
Dallas, Tex.

● Medicine

Robert W. Wilkins, M.D.
Boston, Mass.

George T. Harrell, Jr., M.D.
Gainesville, Fla.

● Anesthesiology

Joseph F. Artusio, Jr., M.D.
New York City
Robert Reynolds, M.D.
Boston, Mass.

● Surgery

James E. Thompson, M.D.
New York City
George P. Whitelaw, M.D.
Boston, Mass.

Non-scientific medically related topics include an address by Gunnar Gunderson, M.D., President-Elect, American Medical Association, who will speak on the subject "Your AMA in 1958." Also scheduled is a panel program entitled "Three Faces of Adam" in which a business man, a doctor's patient, and a doctor's wife will discuss physicians as they see them. Member's wives and guests are invited to this panel.

The two general sessions of the Association for all MAG members will be convened to elect officers, counselors, and delegates to the AMA, to present awards and to hear the MAG President's address. Two sessions of the Association's House of Delegates are scheduled to conduct the business and set the policies of MAG. Two scientific lectureships will highlight the session.

Scientific exhibits will be displayed to present the latest developments and data in the field of medicine. Approximately 50 commercial exhibits will be viewed to provide further information for members.

The 17 Georgia Specialty Societies, cooperating with the Association in arranging the 1958 Macon Session have made possible the outstanding selection of speakers and topics. The excellence of the 1958 Session program is largely due to the untiring efforts of the program chairman representing these specialty societies which are listed as follows:

GEORGIA SPECIALTY SOCIETIES COORDINATING 1958 MAG ANNUAL SESSION

Georgia State Obstetrical & Gynecological Society
Georgia Association of Pathologists
Georgia Pediatric Society
Georgia Academy of General Practice
Georgia Orthopedic Society
Georgia Psychiatric Association
Georgia Chapter, American College of Surgeons
Georgia Urological Society
Georgia Heart Association

Georgia Chapter, American College of Physicians
Georgia Radiological Society
Georgia Society of Anesthesiologists
Georgia Society of Ophthalmology & Otolaryngology
Georgia Industrial Surgeons
Georgia Chapter, American College of Chest Physicians
Georgia Trudeau Society
Georgia Diabetes Association

***ABSTRACT OF 1958 MAG MACON ANNUAL SESSION**

SUNDAY, APRIL 27

- 2:00 p.m.—PEDIATRICS, ORTHOPEDICS & RADIOLOGY
JOINT SECTION
- 2:00 p.m.—PSYCHIATRIC & GENERAL PRACTICE
JOINT SECTION
- 5:00 p.m.—MAG HOUSE OF DELEGATES

MONDAY, APRIL 28

- 9:00 a.m.—GENERAL SESSION SCIENTIFIC (G.P. DAY)
- 11:45 a.m.—GENERAL SESSION BUSINESS
- 2:30 p.m.—ORTHOPEDICS, SURGERY,
ANESTHESIOLOGY, PATHOLOGY &
INDUSTRIAL SURGERY JOINT SECTION
(Trauma)
- 2:30 p.m.—MEDICINE, NEUROSURGERY & EENT
JOINT SECTION (Hypertension)
- 2:30 p.m.—RADIOLOGY SECTION
- 8:00 p.m.—GENERAL SESSION RECONVENED
(G.P. DAY)

TUESDAY, APRIL 29

- 9:00 a.m.—MEDICINE, CHEST, DIABETES & EENT
JOINT SECTION
- 9:00 a.m.—OBSTETRICS & GYNECOLOGY, GENERAL
PRACTICE & ANESTHESIOLOGY JOINT
SECTION
- 11:30 a.m.—GENERAL SESSION LECTURESHIPS
- 2:30 p.m.—OBSTETRICS & GYNECOLOGY, GENERAL
PRACTICE & PATHOLOGY JOINT SECTION
- 2:30 p.m.—SURGERY SECTION

WEDNESDAY, APRIL 30

- 9:00 a.m.—MAG HOUSE OF DELEGATES SECOND
SESSION
- 11:30 a.m.—GENERAL SESSION BUSINESS

*This abstract does not list the many specialty society luncheons and dinners, specialty society business meetings, alumni dinners and social events held in conjunction with the Association's Annual Session.

THROMBOSIS AND THROMBOPHLEBITIS

This complex problem continues to dominate a large part of medicine. Current progress in the solution of this problem is brought into sharp focus by the author.

CHESTER S. KEEFER, M.D., *Boston 18, Mass.*

ONE OF THE HIGHEST honors that comes to any American physician is to receive an invitation to give the Abner Wellborn Calhoun Memorial Lecture. As I scan the list of those who have been honored before me, I feel quite inadequate and very humble. Further, the distinguished physician for whom this lectureship is named set a fine example for all of us to follow.

I pay tribute to this society and to the leaders of the medical profession of this state of Georgia who have kept alive the name of Dr. Calhoun and the memory of what he accomplished for the people during his lifetime. All physicians can profit by studying and following the life and achievements of Dr. Calhoun. He spent his professional life relieving the suffering of his fellow citizens. He did much to improve and save the sight and vision of people. What could be more important than to maintain one of the most precious of special senses, a special sense that enables people to develop foresight and an appreciation of everything in the environment?

So, I stand before you today in an attempt to follow in the footsteps of those who have been previously honored by being named a Calhoun lecturer, and I do so with a deep sense of appreciation for the confidence that has been implied by the invitation of your committee.

Some thirty years ago, I had the experience of

taking care of a pleasant, dignified elderly lady who was the victim of multiple venous and arterial thromboses. Mrs. C. was an obese woman with auricular fibrillation and mild congestive heart failure who over the course of six weeks had a pulmonary infarct, recurrent attacks of abdominal pain with fever and leukocytosis, an attack of pain in the right lower quadrant, and swelling of the right leg. She finally died with the symptoms of shock and collapse.

At necropsy, there were multiple venous thromboses and arterial thromboses as follows: thrombosis of the right iliac and common femoral veins, thrombosis of the inferior vena cava and splenic vein, organized thrombosis of the inferior mesenteric artery, thrombosis of the aorta near the orifice of the coeliac axis and the mesenteric artery, infarcts of the kidney and spleen, hemorrhagic infarctions of the intestine, edema of the right leg, chronic passive congestion of the liver, and chronic myocardial fibrosis.

From the course of events in this case and from the lack of any definite evidence of widespread disease of the vein walls at necropsy, it is difficult to escape the conclusion that these multiple venous thromboses resulted from some change in the blood coagulation mechanism of unknown cause. This disorder of blood coagulation, leading to spontaneous thromboses in the streaming blood, has been designated, for purposes of description, as idiopathic migrating thrombophlebitis. These cases have been

The Abner Wellborn Calhoun Memorial Lecture, Georgia State Medical Society, Savannah, Georgia, April 30, 1957.

THROMBOSIS / Keefer

described by numerous observers, and a pattern has been well defined. Characteristically, the phlebitis appears usually in small lengths of superficial veins. Sometimes it is followed by symptoms of pulmonary embolism and vascular occlusions in the abdomen, brain, or abdominal viscera. *Visceral thromboses may precede or occur without superficial lesions*, as in the case of Mrs. C. Fever and leukocytosis commonly accompany each fresh episode and pulmonary infarction with bloody pleural effusion is not infrequent. Abdominal pain, distention, and melena give indications of mesenteric thromboses.

In all such cases there is a pressing need to study the blood coagulation mechanisms, since it may be possible to determine the cause. In some, thromboangiitis obliterans develops; in a few, cancer of internal organs may be present or polycythemia may appear. In a few cases, as in that of Mrs. C., the only obvious associated features are mild congestive heart failure, auricular fibrillation, and overweight. However, in many cases which have been recorded there are no associated features and the cause remains obscure. One or more attacks of venous thrombosis are frequent, and in patients with multiple attacks, venous insufficiency is seen. Such cases center attention on venous and arterial thrombosis.

It is recorded that in 1840, Cruveilhier, the leading French pathologist of that time, made the challenging statement that "phlebitis dominates all pathology" (*La phlebite domine toute la pathologie*). This challenge was immediately accepted by his German colleagues, and Virchow's teacher, Froriep, charged him to check this statement. Rudolf Virchow² then a young man, set to work and for a period of twelve years worked diligently, carried on experiments, and published numerous papers on thrombosis and embolism. He laid the groundwork for all future studies and investigations that have been made on this important subject since that time. As one reflects upon the theme of thrombosis in 1957, it becomes increasingly clear that the occlusion of blood vessels, whether arteries, veins, or capillaries, and the consequences in structure and function that follow, make up a large segment of medicine today and command attention in the area of diagnosis, prevention, and treatment.

In fact, thrombotic disease is extremely widespread and is responsible for an increasing amount of illness and death in our adult population. It is widely recognized that new light needs to be thrown on the causes of thrombosis in order that we may prevent intravascular clotting. We are beginning to accumulate new information that bears on this important subject.

The development of new surgical techniques, the

use of anticoagulants, and the development of techniques to improve the linear blood flow in arteries and veins and to prevent stasis are all steps in the right direction. Now, it is generally acknowledged that thrombosis and thrombophlebitis are frequent; the time of occurrence is uncertain, and they are always an impending danger. They complicate many illnesses. They cripple and kill. Thrombosis is a factor in the pathogenesis as well as a complication of arteriosclerosis³ and of venous sclerosis, especially pulmonary venous arteriosclerosis.

From numerous anatomical studies, it is clearly recognized that thrombi tend to occur in certain situations in the venous and arterial systems. Aschoff⁴, who was one of the profound students of this disorder, once used a mathematical figure of speech when he said that thrombosis was the function of a number of variables, meaning that it was not due to a single cause. With this statement there is general agreement. There are at least four general conditions which favor thrombosis. They are (1) anatomical changes in the vessel wall, (2) physiochemical changes in the blood plasma, (3) changes in the blood elements, and (4) changes in blood flow, that is, stasis or decrease in the velocity or direction of blood flow or eddy formation.

Before discussing these four general conditions, let us take a look at the structure of a thrombus.

Thrombus Formation

Thrombi are peculiar clots formed during life in the streaming blood. They begin with the deposition on the wall of the blood vessel of a minute mass of platelets which grow and grow by the adhesion of other platelets as they go by. The beautiful studies of Lutz and his associates⁵ with cinematographic recordings of the movements of blood through the capillaries and larger blood vessels, show the vast majority of platelets and leukocytes flowing slowly along the walls of the blood vessels in contrast to the swiftly moving red cells in the midstream. As these small masses of platelets accumulate, they project from the wall of the blood vessel and run transversely to the blood stream, joining freely with one another; but they do not stand alone because they are so sticky that they catch the passing leukocytes, as MacCallum⁶ has said, like flies on sheets of flypaper. At the same time, they liberate thromboplastic substances and set up the chain reaction which results in the precipitation of filaments of fibrin from all sides. These filaments form a fine meshwork. Red and white corpuscles become enmeshed in fibrin and form a solid mass of clot. The welding together of platelets results in solid masses of these elements so that their outlines can no longer be seen, but in section they appear as finely granular

bands in the substance of the thrombus.

As this peculiar clot forms, it grows by accretion. At first it is red in appearance due to the enmeshed red corpuscles, but as it grows and ages the head of the thrombus, *Kopteil*, as it is designated by Aschoff¹ becomes white; and beyond in the middle and in the tail there is a stagnant column of blood that reaches to the next affluent vein. In the tail one sees an ordinary clot which is often long and soft. It is the tail that is likely to break off from the head and be swept into the blood stream, causing pulmonary embolism and death. The point here is that the head of the thrombus, like the head of a tapeworm in the intestine, is attached to the vessel wall and the tail is usually free. That part of the thrombus which is the head and is white forms in the moving stream, whereas the tail or the red part of the thrombus forms only after obstruction to the free flow of blood has occurred. As I have said, the thrombus usually extends to the next affluent vein or to an area where there is some external compression of the vein by a ligament, a tendon, or an artery. It was Neumann who pointed out quite clearly that thrombi arising in the plantar of deep calf veins and extending toward the heart are often segmented. The clot stops at the point of venous compression by tendons, ligaments, or muscles. Beneath such an area of compression, the blood is not clotted.

To explain thrombus formation, then, we must develop a further understanding and seek for answers to the question of why platelets are deposited on the endothelium of blood vessels, whether arteries or veins. Is it because of injury to the endothelium? Is it due to physicochemical changes in the blood plasma? Is it because of some chemical change in the platelets themselves? What role do such factors as stasis and slowing of the movement of blood and its elements play in spontaneous clotting and thrombus formation? That all of these forces are important there is no doubt. What is most important, however, is the fact that we need to determine the relative significance of damage to the endothelium and the changes that occur in the blood plasma in order to develop a rational approach to the prevention as well as the treatment of thrombosis once it occurs. We need vigorous and orderly research carried on in a scientific way to solve these problems. It is, of course, very natural that our efforts should be directed primarily at curing and preventing thrombosis and secondarily at understanding what is happening. But control and understanding are equally essential; the old saying, "Practice without theory is blind, theory without practice is sterile," is quite true when applied to thrombus formation.

Changes in Blood Vessel Walls

It is an old but fundamental observation that

when a blood vessel is ligated between two ligatures without damaging the endothelium, the blood in the isolated vessel does not clot or it clots very slowly. It then has the appearance of a red clot. When, however, the endothelium of a blood vessel is injured in any way and the blood is moving slowly, thrombosis soon follows. *Injury to the endothelial lining of blood vessels, then, is a most important factor in initiating thrombosis, whether arterial or venous.*

Let us examine the anatomical alterations in arteries and veins that predispose thrombosis, because it is difficult to escape the conclusion that atherosclerosis of the arteries and phlebosclerosis of the veins are the most important factors predisposing the development of thrombosis.

All blood vessels are lined with a single layer of endothelial cells. This lining membrane is smooth and protects the streaming blood against any contact with other tissues. Beneath the endothelium and extending to the internal elastic membrane there is a thin layer of fibroelastic tissue. The individual cells of the endothelium are cemented together. The fibroelastic tissue of the intima is the area where the initial changes take place in atherosclerosis. The first change is the formation of new connective tissue, with small and large wandering cells which are loaded with fat. This proliferation of connective tissue and the wandering cells causes a localized elevation and distant thickening of the intima. On careful examination, the fat is found to be lodged in all layers of the intima and on the surface, and the fat-laden cells lie free in the crevices of the connective tissue. Also, the freely branching connective tissue cells are engorged with fat. This is what I choose to call stage I.

The next stage is characterized by hyalinization and necrosis of connective tissue around the abundant accumulation of fat. The superficial or innermost layers become very much thickened and are composed of a dense, homogeneous connective tissue which covers the yellow opaque fatty material so that it appears to lie in the depths of the intima. These yellow masses are soft and mushy, hence their name, atheroma.

For some time the internal elastic membrane appears to remain intact and normal in appearance, but at a later stage it also shows signs of fragmentation or interruption and then changes take place in the media. The important point here, however, is that the initial process in the development of atherosclerosis appears in the intima and no quantitative change is visible in the media.

Now, the relation of these subendothelial or intimal lesions to the development of arterial occlusion or thrombosis has been studied extensively by Leary⁷, Dock,⁸ Wolkoff,⁹ Winternitz,¹⁰ and others.¹¹ The

THROMBOSIS / Keefer

studies of Leary are most significant. From the careful examination of a large number of coronary arteries, he divided his cases of coronary atherosclerosis into two major groups based on the reaction of the subendothelial tissues. He found that patients under the age of 55 years, dying of coronary artery thrombosis or from coronary artery occlusion without thrombosis, had a striking proliferation of the connective tissue or fibrosis of the subendothelial fibroelastic tissue associated with the presence of fat cells. In these patients, the fat cells did not accumulate in large numbers, but the proliferation of the connective tissue was often so striking that it encroached upon the lumen in such a manner as to either occlude it or cause great narrowing. When thrombosis occurred in these cases, it followed subendothelial necrosis which extended to the endothelium.

In older people, the characteristic lesion was the accumulation of large collections of lipoid or fat cells with minimal connective tissue support. As a result of poor nutrition, massive necrosis occurred in these areas, giving rise to atheromatous "abscesses." When one of these reached the endothelium and ruptured into the lumen, *thrombosis* usually followed.

In short, in the young the fibrous tissue component of the arteriosclerotic plaque is often greater than the lipid component. This was what Leary designated as the reaction of youth. The reaction of older age was a greater atheromatous component.

There is good evidence that when thrombosis occurs in a coronary artery, there is an associated lesion of the intima. The same statement can be made for other vessels. There are reasons for believing that these changes in the intima play a large part in the initial stages of thrombosis. Thus, thrombosis cannot be divorced from changes in vessel walls.

Vigorous attention is now being given to those factors which may be responsible for changes in vessel walls that predispose to thrombosis, such as injury to the endothelium, degeneration and proliferation of fibroelastic tissue, the deposition of fat, lipid metabolism, the formation of collagen, and the mechanism of "serous inflammation," the cause of bleeding into blood vessels, the reaction of arterial walls to injury both chemical or from infection, and the influence of nutrition, both the lack of substances such as vitamin B6 or the lack of certain amino acids in the diet as well as an excess of certain fats in the diet. The total fat content of the diet or the total calories supplied from fats have a major effect on the serum cholesterol level of adults, the effect being smaller in younger people.

Although the evidence is still inconclusive, there is some indication that there are quantitative differences between the responses to different fats. This subject is one of exciting interest.

In the final analysis, there are two sides to the problem of arteriosclerosis insofar as fat is concerned. On one side, there are disturbances of lipid metabolism; on the other, there are the local factors in the arterial walls that operate to prevent and promote the deposit of lipids.

To many it seems highly probable that local changes and functional alterations in the walls of the arteries are the result of injury and that the fibroelastic proliferation and necrosis and the accumulation of fat are subsequent processes. The one important question to be answered is the relative importance in disturbed fat or cholesterol metabolism in initiating the first step in atherosclerosis. That it plays an important part in the total process there can be no doubt.

In an attempt to prevent atherosclerosis or to delay its progress, experiments with low-fat diets are going on. These long-range studies are important for all of us to follow. Although these experiments are directed primarily at the problem of atherosclerosis, they are related to and cannot be separated from the problem of thrombosis.

Finally, there is another type of change in blood vessel walls that is important in the problem of both venous and arterial thickening and subsequent alteration of the blood stream which may lead to venosclerosis or arteriosclerosis. I refer to the development of irregular patches of thickening resulting from the organization of small thrombi which do not occlude blood vessels. This mechanism of producing arteriosclerosis has been studied intensively by Duguid³ and we are now coming to recognize the significance and importance of the organization of emboli and small thrombi with partial or complete obstruction of blood vessels. One of the most striking studies has been made in the development of pulmonary artery arteriosclerosis following multiple embolies in the pulmonary vessels. It has been recently recognized that multiple emboli in the lungs, often unrecognized, can produce profound occlusive changes in the pulmonary blood vessels, indistinguishable from pulmonary arteriosclerosis. Cor pulmonale and right sided heart failure follow.¹² The beautiful experimental studies of Harrison¹³ on the organization of fibrin thrombi in the lungs of animals and the production of pulmonary artery arteriosclerosis furnish convincing evidence that lesions in blood vessels, indistinguishable from arteriosclerosis, follow the organization of thrombi.

Changes in Veins

The anatomical structure of veins resembles in

some respects that of arteries, but there are some striking differences which need to be appreciated. The walls of veins are thinner than those of arteries because of the irregularity in the composition of the tissues. There is a smaller amount of muscular and elastic tissue so that they are generally more flaccid and less contracted than the arteries which they accompany. They are compressed at the point of contact or intersection with arteries, ligaments, bones, or tendons. In the veins of medium size, the intima consists of lining endothelium and a thin layer of fibroelastic tissue. A distinct internal elastic membrane is seldom present. *In some veins, the intima contains bundles of involuntary muscle* (iliac, femoral, saphenous, mesenteric, basilic, and cephalic). The media of veins is the most variable of all coats and consists of circularly disposed thin sheets of muscular and fibroelastic tissue reinforced by longitudinal strands of fibroelastic tissue, sometimes muscle. In the deep femoral, popliteal, and saphenous veins, the longitudinal strands constitute a distinct zone beneath the intima. In some veins the thickness is due to an excess of fibroelastic tissue in the media; in others the muscular tissue is more abundant. In some veins the media may be so thin as to be almost wanting. The veins also differ from arteries in having valves. These projections are crescentic projections of the intima, covered on both sides with endothelium. These venous valves have been studied recently by Saphir¹⁴ who directs attention to valvulitis as an area of injury. We need to know more about the alterations in the blood supply to veins with advancing age, because the retrogressive changes may be related to the blood supply of the vessels.

Phlebosclerosis and Endophlebohypertrophy

During the past few years, Lev, Saphir, and Littman¹⁵ have made extensive studies on the subject of endophlebohypertrophy and phlebosclerosis. They described the process of endophlebohypertrophy at different ages and differentiated this process from other retrogressive changes found in senile phlebosclerosis. They examined especially the popliteal veins, the external and common iliac veins, and the left innominate and superior vena cava.

Their conclusions were of considerable importance in understanding the anatomical changes that take place in the veins at all age periods, but they are of special importance in bringing into focus the location and the character of retrogressive changes found in senile phlebosclerosis, because thrombosis in veins not infrequently begins over areas of phlebosclerosis or in areas where there is a local disturbance of blood flow.

Lev et al have concluded that endophlebohypertrophy, which is a local increase in the elastic

muscle and collagenous fibers of focal plaques that can be seen grossly on the luminal side of the internal elastic lamella of the veins, is present from birth and that it is localized at regions of mechanical stress. These areas are seen at the entry of tributaries of veins and to one or both sides of the vein contiguous with the artery or where veins impinge upon bone and muscle. They are considered to be the response of the vessel wall to a mechanical factor which is a local disturbance in blood flow and is not necessarily due to direct arterial pressure on the wall.

As age advances, retrogressive changes occur in the areas of endophlebohypertrophy; these are called endophlebosclerosis. Increased venous pressure increases both hypertrophy and sclerosis. Injury to veins and the valves of veins¹⁴ and anatomical changes in the vessel wall influence the direction and flow of blood and its elements.

We need further investigations of veins in order to understand the influence of increased venous pressure, alteration in the size of the lumen of veins due to local varicosities and local thickenings and alteration in flow such as backward flow and eddy formation, and the influence of these factors in spontaneous thrombosis. Spots of injury at certain points in a vein may lead to the chain reaction that ends in thrombosis.

Summary

In summing up the role of anatomical change in the blood vessel walls in the pathogenesis of thrombosis, it is difficult to escape the conclusion that the logical explanation for the formation of most thrombi is lodgement of platelets at a spot of injury to the endothelium. Certainly the exposure of the coagulable circulating blood to an injured or dead surface of a blood vessel is the starting point of most thrombi. A sclerotic patch in the coronary arteries which undergoes necrosis, rupture, or hemorrhage; an infected cranial sinus in otitis media; the uterine veins in puerperal sepsis; the portal branches leading away from an abscess; an infected thrombus on a heart valve; an infected thrombus on a venous valve are all examples. Non-infectious trauma, panarteritis, thromboangiitis, and atherosclerosis predispose thrombosis, just as phlebosclerosis, trauma, varicosities, and infections of veins precede thrombosis in many instances.

Now, aside from injury to the vessel wall, it is widely recognized that the modification of the velocity and direction of blood flow is of greatest importance. Let us, therefore, examine this aspect of the problem of thrombosis.

Changes in Blood Flow Predisposing to Thrombosis

It is common knowledge that thrombi tend to form

in certain locations of the venous and arterial system. These are the deep veins of the calf (posterior tibial and peroneal veins and their tributaries), the proximal part of the femoral vein where the valves are present, the plantar veins, the pelvic network, and the venous network of the dura mater, and the atria of the heart. It is less common for thrombi to form in the veins of the upper extremities. On the arterial side of the circulation, thrombosis is seen most often in the coronary arteries, the arteries of the leg, the aorta, and the carotid and cerebral vessels. In attempting to explain the localization of thrombi in these areas, the direction of the blood current, that is, eddy formation, and the velocity of the flow of the blood in different parts of the body have been studied.

For example, Wilkins and his associates¹⁶ have made exhaustive studies on the linear velocity of blood flow through the veins of the lower extremities following compression of the leg with elastic stockings. They have demonstrated clearly that the mean linear velocity of blood flow in the calf veins in the supine position can be increased five fold by exerting pressure on the calf which approximates the venous pressure. Also, Wright and Osborne¹⁷ have studied the effect of posture on venous velocity as measured by²⁴ sodium chloride. The venous velocities were equal in the two legs and the day to day measurement showed a fluctuation of about 25 per cent of the initial blood flow. When a person stands or sits, the venous flow rate is about halved when compared to the supine position. When the subject is lying head down (10 degrees) or after vigorous dorsi or plantar flexion of the foot, the venous velocity is about doubled. So the effects of gravity and exercise, either active or passive, and change in the cross sectional area of veins are important in velocity flow.

Eddy formation and reversal of flow, due to bends in the stream or to partial obstruction or narrowing of the vessels from external compression or from two streams of blood uniting at different velocities of flow, are both factors in the movement of plasma and the formed elements of the blood. Aschoff and his colleagues have studied models of flowing streams in order to gain information on this matter. Since a thrombus is a heaping up of the particles, that is, formed elements in the blood, and since thrombi do not occur in the rapidly flowing stream or by complete stoppage of the stream, it is apparent that the blood must flow differently or more slowly if thrombus formation is to occur. We need more information about what happens to the blood coagulating mechanism when there is

sudden slowing, backward flowing, and eddy formation in the streaming blood.

In summing up the influence of alterations of blood flow in predisposing to thrombosis, the evidence is highly suggestive that the decrease in the linear velocity of blood flow through veins or arteries is important in predisposing to thrombosis. Dehydration, stasis of blood in dilated veins, partial obstruction to flow with eddy formation of blood or backward flow, and posture are all important factors. But we know that thrombosis does not occur from stasis alone, although clotting of blood may follow thrombosis once the stream of blood has been stopped; so let us examine the changes in the blood plasma and blood elements which may explain thrombosis.

Changes in Blood Plasma Predisposing to Thrombosis

Changes in the physical character and chemical constituents of the blood are being studied with great vigor in order to detect factors that might explain spontaneous intravascular clotting. Many of the factors that interfere with the normal clotting of blood have been defined; but in the present state of our knowledge, it is much more difficult to pinpoint disturbances that shorten the coagulation time of blood and cause intravascular clotting. Our methods for detecting factors that influence the acceleration of clotting are not sufficiently refined to study the matter accurately in thrombosis. Lutz and his associates¹⁸ have noted intravascular clotting in the cheek pouch of the hamster following injury to the blood vessels or following staphylococcic infections or in animals with tumors. It has been recognized for years that thrombosis occurs in some patients following infections or in those who have some alteration in the plasma proteins with associated diseases (cancer, amyloidosis, nephrosis, multiple myeloma). Attention is now being directed to all of the conditions associated with damage to tissues which cause alterations in the blood plasma and which account for an increase in the erythrocyte sedimentation rate, such as surgical operations and myocardial infarction. Also, such factors as the ingestion of fat and its effect on blood coagulation are being explored. Increases in the blood fibrinogen, increases in accelerating factors, and changes in the prothrombin and other blood coagulation substances may be all important in promoting thrombosis. The changes occurring in cancer are an example.

Venous and Arterial Thrombotic Syndromes Associated with Cancer

It is well known that since the days when the great French clinician Trousseau made the diagnosis

of cancer of the stomach in his own case as the result of a thrombosis in one of the veins of the leg, that thrombosis, superficial or deep, are seen not infrequently in association with cancer of the stomach, pancreas, bronchus, ovary, prostate, or colon. Thrombophlebitis and particularly recurrent thrombophlebitis of the superficial or deep veins may be the earliest clinical sign of visceral cancer, and the patient may have no symptoms from the cancer itself. A good clinical clue to follow up, then, is that any patient over 50 years of age who has one or more attacks of thrombophlebitis without obvious cause and who has an accelerated sedimentation rate of erythrocytes should be suspected of having an obscure visceral cancer. The mechanism of the thrombosis is not understood. Increased coagulability of the blood has been noted in some patients by the usual techniques. Anti-coagulant therapy has been ineffective in such cases. I have had the experience of seeing a woman who had recurrent attacks of thrombophlebitis with small pulmonary emboli requiring femoral vein ligation two years before the signs of cancer of the stomach became manifest and caused her death.

There is another aspect to this story of the thrombotic syndrome associated with cancer. It has been recognized for many years that non-bacterial thrombi on heart valves may be associated with cancer. Some years ago I¹⁹ directed attention to the fact that patients with diseases such as cancer and leukemia were likely to have these thrombi in their heart valves, and that they served not infrequently as the base for the development of bacterial endocarditis. Thus, I recorded cases of both bacterial and non-bacterial endocarditis associated with cancer, heart failure, leukemia, etc. Recently, MacDonald and Robbins²⁰ and Smith and Yates²¹ have discussed the significance of these cases. Smith and Yates²¹ pointed out that nonbacterial thrombi in heart valves were not infrequently associated with cancer and that they served as a source in some cases for visceral embolism and infarction. Emboli are found in the spleen, in the kidney, and in the brain. MacDonald and Robbins²⁰ reported that in 15 per cent of 78 cases nonbacterial thrombotic endocarditis gave rise to emboli and contributed to death. Embolism to the brain, kidney, spleen, lung, intestine, and even the coronary arteries was recorded.

These thrombi were formed in patients with cancer of the stomach, pancreas, and lung; however, cancer elsewhere was also noted. Also, cases with heart failure, cerebral vascular accidents, pneumonia, and acute myocardial infarction were also recorded. Thromboses were also noted in the leg veins, the walls of the heart, the inferior vena cava, the

walls of the aorta, splenic veins, renal arteries, and pulmonary arteries.

From a study of the thrombotic syndromes associated with cancer and other conditions, it is important to remember that they occur not only in the veins but on the heart valves and in the arteries, and that these thromboses give rise to embolism not only in the pulmonary vessels but also in the organs supplied by the systemic arterial circulation. It has been postulated that in these cases there is some defect in the blood coagulation mechanism, such as an excessive amount of antifibrinolytic activity in the blood, to account for these thrombi. This is a complex subject requiring intensive study.

Venous and Arterial Thromboses in Other Conditions Associated With Alterations in the Blood Plasma

While a number of disorders have been described that are associated with a prolongation of normal coagulation and bleeding, only a few have been recorded in which alterations in the blood coagulation mechanism have been associated with thrombosis; and in these it has been difficult to identify the factors involved. Factors that shorten or accelerate blood coagulation in man are being studied intensively at present, and we can look forward with confidence to a better understanding of the problem within the foreseeable future. The role of the ingestion of fat on blood coagulation²² is an example of one approach to the problem. Also, changes in the various protein constituents of the blood in such diseases as amyloidosis, nephrosis, and cancer are being explored. Also, changes in blood viscosity, in the number of platelets, and in the amount of fibrin in the blood following the ingestion of drugs, anesthesia, and surgical operations or infections are important factors to consider. We need to continue to search for the various factors involved.

Changes in Blood Elements

Of all the formed elements in the blood which are important in intravascular clotting, the platelet is the most important. It is recognized, for example, that intravascular clotting is exceedingly rare when the total number of platelets in the circulating blood is decreased. When, however, there is an increase in platelets such as occurs following splenectomy and other surgical operations, or in such disorders as polycythemia vera or following infections, thrombosis is more likely to occur. The agglutination or conglutination of platelets and the formation of platelet thrombi in the circulatory blood are phenomena that need explanation, because we recognize that these masses of platelets adhere to blood vessels and elaborate substances that initiate the chain

THROMBOSIS / Keefer

reaction of thrombosis.

In summing up the influence of alterations in the blood plasma or blood elements or both in the development of thrombosis, it is fair to say that these changes are important; it is essential, however, to interpret these changes as modified by velocity of blood flow, posture, and other factors. The most persuasive argument that can be developed in support of the great significance of physicochemical factors as a primary cause in thrombosis is the fact that in many of these cases the thromboses occur in all parts of the body—the upper extremities, lower extremities, brain, and internal organs. Moreover, anticoagulant therapy as commonly employed is ineffective, especially in the thrombosis of cancer.

Nevertheless, the widespread use of anticoagulants as a prophylactic measure against recurrences of thrombotic episodes requires that we center our attention on all of the factors that enter into thrombus formation and especially the system of factors, new and old, involved in the intravascular clotting of blood.

I conclude this discussion with some comments upon the prevention and treatment of thrombophlebitis and thrombosis.

Prevention and Treatment

During the past 20 years, we have made great strides in the prevention and treatment of thrombosis and thrombophlebitis. The problem has been approached on a broad front, and a large group of specialists and highly trained people have been making an attack on it. Since the problem is intimately concerned with atherosclerosis and phlebosclerosis, it is being studied by a large group to discover ways and means of preventing and treating atherosclerosis. Also, since the problem is concerned with stasis or slowing of blood flow in arteries and veins, physiologists have concentrated upon a study of the factors that slow up blood flow and have attempted to devise methods to increase it. Further, since intravascular clotting is most important, methods of prolongation of clotting have been devised to prevent thromboses or to slow up their progress (the anticoagulants). Finally, the surgeons have accomplished great feats by prevention of the spread of thrombi by ligation—by the removal of emboli and of thromboses by vascular resection. Real progress has been made.

There are two primary aspects of treatment, namely the use of elastic stockings to prevent venous thrombosis in the leg veins and the use of anticoagulants.

Elastic Stockings

It is generally agreed that stasis of blood or the

slowing of the linear velocity of the blood stream is an important factor in the development of venous thrombosis and thromboembolism. Moreover, it is known that the deep veins of the calf muscles are the most frequent site for the development of thrombi in medical or surgical patients. These thrombi are likely to develop most often following the sudden confinement to bed of a previously active ambulatory older person who has had a surgical operation or heart failure. These patients do not receive the benefits of increased venous flow from active exercise or the aid of gravity in maintaining an efficient venous circulation. Voluntary and passive movements of the extremities, the elevation of the legs at an angle of 10 degrees above the level of the heart, and the bandaging of the legs or the use of elastic stockings have all been used to increase the linear velocity of blood flow in the legs of the bed patient.

The use of elastic stockings has been studied extensively in our clinic by Drs. Wilkins and his associates^{16,23} over the past eight years with great success, and all of our bed patients are given elastic stockings to wear when they enter the hospital.

It can be demonstrated that the linear velocity of blood flow in the calf veins is much lower than in the centrally located veins, and that the velocity in any vein depends on the volume flow of blood and its cross-sectional area. The volume flow increases with exercise and the velocity flow can be increased by external compression of the leg. Dr. Wilkins and his group have shown that there is a critical or optimum pressure to be exerted on the legs by elastic stockings in order to provide the maximum linear velocity of flow through the veins. This pressure approximates the local venous pressure. This is an important point, because higher pressures will cause a reduction of both volume flow and linear velocity of blood flow. In our clinics Drs. Wilkins, Stanton, Mixer, and Litter have shown that when elastic stockings are routinely applied to hospital patients over 20 years of age, the expected incidence of fatal pulmonary embolism can be reduced by about 50 per cent. All types of patients may safely wear elastic stockings except those with severe local disease in the legs such as ischemia, inflammation, or trauma.

The use of elastic stockings in all patients confined to bed, then, is a means of preventing thromboembolic disease by increasing the linear velocity of the blood flow in the legs,

The Use of Anticoagulants

The use of anticoagulants on both a short-term and a long-term basis is a truly great advance in the prevention and treatment of thrombosis. It is unnecessary at this time to go into a detailed discussion of this subject because it has been done

very well and thoroughly by others.^{24,25,26,27,28} I propose to sum up some of the high points in this form of treatment.

The profession is accumulating valuable information about anticoagulant therapy at a rapid rate, and we are learning more and more about its effects and the problems created by its use. Since there are areas of disagreement and controversy, it is difficult to make any firm statements that are not subject to change. There is a need for well documented clinical studies on a sufficient number of adequately controlled patients so that a critical evaluation of anticoagulant therapy may be made. However, from experimental studies and careful follow-up of patients, certain facts emerge.

First of all, anticoagulant therapy has been used widely in the prevention and treatment of:

- 1) Postoperative venous thrombosis.
- 2) Recurrent thrombophlebitis and persistent deep vein thrombosis with or without pulmonary embolism.
- 3) Rheumatic heart disease and auricular fibrillation with systemic or pulmonary emboli.
- 4) Coronary artery disease including myocardial infarction and angina pectoris.
- 5) Cerebral and peripheral artery disease, including thrombosis and embolism.

Short term anticoagulant therapy (one to six weeks) has been used most extensively during the acute phase of myocardial infarction and following surgical operations for the prevention and treatment of venous thrombosis.

In myocardial infarction, it is used by some physicians in *all* cases, either so-called "good risk" or "bad risk" ones.* The reason for adopting this policy is that it is difficult to predict whether a good risk case during the first twenty-four to forty-eight hours will be a poor risk case at seventy-two hours.

It has been shown that anticoagulant therapy during the acute phase of myocardial infarction is a treatment for the disease and that it reduces the mortality. This is explained in the main by the lowering of the incidence of thrombus formation in the endocardium and in the veins of the extremities and the decrease in the incidence of thromboembolic complications. Further, it is possible that heparin and dicumerol may cause vasodilatation and improved blood flow to the myocardium. In any event short term anticoagulant therapy is employed very widely in patients with myocardial infarctions during the acute phase, and its effects are highly beneficial.

*A "good risk" patient is defined as one who has had his first attack, with a normal size heart, without hypertension and without fever, leukocytosis, or signs of congestive heart failure, but with definite signs of infarction by electrocardiogram. A "poor risk" patient is one who, during his first or second attack, has an enlarged heart, hypertension, fever, leukocytosis, and signs of shock or heart failure.

In postoperative venous thrombosis, anticoagulant therapy has been used to prevent as well as to treat venous thrombosis. In some instances it is used alone; in others, it is used along with elastic stockings or with vein ligation. The object here is to prevent venous occlusion and pulmonary embolism. It has been shown by Bauer that treatment of postoperative venous thrombosis with heparin reduces the mortality rate from thromboembolism and reduces the length of stay in bed and the incapacitating effects of thrombosis. Fever, pain, and swelling of the leg disappear promptly, usually within five days. Heparin was generally given by Bauer by the intermittent intravenous method for five to ten days or until the temperature reached the normal level. The amounts varied from 300 to 400 units a day. He also encouraged early mobilization. Farmer and Smithwick²⁹ have reviewed the cases seen in our own clinic and have attempted to select the patients in whom thrombosis and thromboembolic disease is likely to occur. From their data, the most likely candidates for postoperative venous thromboses are people over 50 years of age who have had major or pelvic surgery, a major fracture of bone, or a major amputation and those who have developed serious postoperative complications. Also, such factors as cancer, obesity, prolonged operation (three hours or more), heart disease, varicose veins, infections, abdominal distention, prolonged immobility-shock, previous thromboembolic disease, and dehydration are important. Certainly it is the patients with various combinations of these factors who need prophylactic heparin treatment.

Long Term Therapy

We are now beginning to obtain an evaluation of long term anticoagulant therapy. The recent review by Suzman³⁰ of South Africa is most important, and his conclusions are worth noting. This procedure has proved to be safe and practical provided adequate laboratory facilities are available for proper control of dosage and prevention of hemorrhage. Its prophylactic value is established for recurrent thrombophlebitis and pulmonary embolism and for thromboembolism associated with auricular fibrillation. The available clinical data suggest that the prognosis is influenced favorably in patients who have recovered from a *severe* attack of acute myocardial infarction, but additional information is needed to establish this fact firmly and to establish the prophylactic value of long term therapy for patients in whom the presenting attack is mild.

Dr. Suzman concludes his review by urging more intensive studies concerning the etiologic basis for the clotting in various types of thromboses. He points out the continuing need for prophylactic

treatment of thrombotic disease based upon a more rational basis, a basis to improve efficacy and safety. With this view I am in complete agreement, and I have attempted to outline in a broad way the gaps in our knowledge concerning the etiology of thrombosis.

In conclusion, I submit that the problem of thrombosis and thrombophlebitis can be solved by developing new knowledge in the broad field of science bearing on the riddle of intravascular blood coagulation and blood vessel injury and what they contribute to the initiation of the clotting. This information must be developed through research in the broad field of biochemistry, including the chemistry of proteins, enzymes, lipids, and the complex mucopolysaccharides of connective tissue. We need to know more about the platelet and the leukocyte as well as the other elements of the blood. We need to know what makes them agglutinate and stick together and adhere to blood vessel walls. A more profound knowledge of hemodynamics and the effect of blood flow, blood currents, and the flowing together of two unequal streams, eddy formation, and the effects of vascular "weirs" is needed. All fields of biological, natural, and physical science can contribute the necessary knowledge. Until the problem has been solved, we, as physicians, will of necessity need to continue our observations and our attempts to prevent and treat these conditions on the basis of more scientific and less empirical methods. Much progress has been made. It has been slow but steady. There are many gaps in our knowledge that science is attempting to narrow. The future is bright in this war against thrombosis and thrombophlebitis, but victory can be achieved only by advancing on all scientific fronts.

We all look forward to the day when thrombosis and thrombophlebitis can be understood and controlled. The object here is to prolong the effective years of life.

While it may be true today that phlebitis as such may not "dominate all pathology," at least thrombosis and thrombophlebitis continue to dominate a large part of medicine. The need for new knowledge is great. An understanding of thrombosis and thrombophlebitis will enable us to give new life to years—new and comfortable life.

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GASTRIC DIVERTICULUM

This rare lesion may be asymptomatic, or it can be the source of persistent or recurrent upper abdominal symptoms which may include hemorrhage or perforation.

DUNCAN SHEPARD, M.D., *Atlanta, Georgia*

GASTRIC DIVERTICULA OCCUR predominantly in the juxta-esophageal or juxta-cardiac area of the stomach on the posterior wall. The literature on the subject is somewhat confusing as some authors have lumped all types of gastric diverticula together, including traction diverticula due to inflammatory diseases of surrounding organs and congenital diverticula in other parts of the stomach. Brown³ was the first to describe the roentgenological and surgical findings in 1916. Juxta-esophageal diverticulum is quite rare. Brown, Bissonette, and Albee² found thirty cases in 60,000 x-ray examinations of the stomach; Eells and Simril⁴ found twenty-five cases in 30,000 gastro-intestinal series, an incidence of less than one per cent; all authors agree that their true incidence is somewhat higher than the number found by x-ray.

Etiology

Most investigators agree that there is a congenitally weak spot near the esophagus on the posterior wall of the stomach, where the longitudinal muscle fibers spread out to cover the stomach, and it is at this area that the diverticula are most prone to occur. They are true diverticula in that they are covered by both the circular and longitudinal muscular coats in contra-distinction to the acquired pulsion diverticula, which are bare of a muscular coat and the traction diverticula, which are due to adhesions from some surrounding inflammatory process. That they are congenital is pointed out by Eells and Simril⁴ and by Michel and Williams.⁶ They have been found in embryos, and in some cases, ectopic pancreatic tissue is found in association with the diverticulum. Ogur and Kolarsich⁷ have shown that gastric diverticula are normal in pigs, monkeys, and ruminants. Diverticula in this location are always single.

Age Incidence

They may occur at any age but have been reported from fetal life to the ninth decade. Bralo and

Spellberg¹ found that their cases ranged from twenty to sixty-seven years while Michel and Williams⁶ found an age spread from thirty to fifty years. Palmer⁵ stated that the third, fourth, and fifth decades were the age of most frequent incidence. Sommers and Goodrich¹⁰ reported an age spread of twenty-three to seventy-seven years. Most authors found that they are more common in the female.^{2,6,10}

Diagnosis

Many of the juxta-esophageal diverticula are asymptomatic and it is often difficult to evaluate the symptoms when they do occur as many of these are associated with other upper gastrointestinal lesions, such as cholelithiasis, duodenal or gastric ulcer, gastric carcinoma, and chronic pancreatitis. When a gastric diverticulum is found by x-ray, it is well to rule out other diseases as the possible cause for symptoms. Epigastric pain, often radiating to the retro-sternal area and at times aggravated or relieved by food, may occur. Vomiting, upper abdominal tenderness, distention, and dysphagia may all be caused by this lesion. Brown et al.,² point out that the pain may be nocturnal and crampy in nature and that on the other hand, lying down will sometimes relieve the symptoms. Nausea and vomiting may also be present, as well as upper gastro-intestinal hemorrhage, at times of large magnitude. Palmer⁵ points out that lying down will often aggravate the pain; that it is usually intermittent and accompanied by pyrosis, gas, and belching. Sommers¹⁰ has pointed out the similarity to duodenal ulcer distress, in that it occurs with exacerbations and remissions. Van Wezel¹² reports such a patient, who got relief by lying on his left side after meals. Physical findings will vary from no findings to slight epigastric tenderness. Gastro-intestinal x-ray with the use of barium is the single most important factor in making the diagnosis. The diverticulum characteristically will be seen on the posterior wall of the stomach within

GASTRIC DIVERTICULUM / Shepard

four to five centimeters of the esophagogastric junction and is best seen on lateral or oblique views. The pliability of the surrounding stomach is normal, and at times, normal rugal folds can be seen running into the opening of the diverticulum. They will vary from one to six centimeters in diameter. The Trendelenberg position is often essential in demonstrating the defect. Many of the diverticula will retain barium for a few hours to several days, as is pointed out by Sommers and Goodrich.¹⁰ At times it is difficult to rule out the possibility of a traction diverticulum secondary to surrounding pathology or a diverticulum or ulcer crater secondary to carcinoma, leiomyoma, or sarcoma; but as a rule, the typical location of the lesion, the rugal folds seen entering its mouth, and the pliability of the surrounding gastric wall will enable the radiologist to be sure of the diagnosis. Gastroscopy has been recommended by many authors as a means of differentiation from gastric ulcer or malignancy,^{1,2,4} but Seaman⁹ warns against this maneuver, because of the possibility of blindly entering the diverticulum and perforating it. Gastric diverticulum in many cases is associated with diverticula elsewhere, such as the duodenum, Meckel's diverticulum, and diverticulosis of the colon.^{5,13}

Complications

Complications are rather infrequent but are varied in nature. The commonest are hemorrhage, rupture of the diverticulum, torsion with gangrene, and perforation and concomitant malignancy. All authors agree that these diverticula do not predispose to malignancy but that it is sometimes difficult to distinguish them from an ulcerating malignancy. Other ulcerating lesions of the upper gastro-intestinal tract must be eliminated as a possible source of hemorrhage before the juxta-esophageal diverticulum is incriminated, although an occasional case has been reported with massive hematemesis and melena from this source. Brown et al.,² report hemorrhage in two of their thirty cases. Michel and Williams⁶ report gastritis with ulceration in the diverticulum and subsequent massive hemorrhage, while Palmer⁸ reports perforation of the diverticulum and concomitant hemorrhage into the peritoneal cavity. Sommers and Goodrich¹⁰ report three cases of perforation with hemorrhage into the peritoneal cavity and found erosion, gastritis and/or ulceration in one-third to one-half of the 449 cases which they culled from the literature. Bleeding is probably the commonest complication but massive bleeding is still quite rare. For example, in Sommers and Goodrich's¹⁰ twenty-one personal cases, only six had symptoms which they could attribute to the diverticulum, and one of these had hematemesis and two,

tarry stools. Ogur and Kolarsick⁷ report a case of gastric diverticulum with intussusception of the diverticulum into the stomach, gangrene, perforation, peritonitis, and death.

Treatment

Most authors agree that medical treatment is to be preferred and should consist of frequent feedings of a bland diet and alkalis; most of the symptomatic cases will respond to this form of therapy. However, if the diverticulum cannot be definitely differentiated from malignancy, if medical treatment does not relieve the symptoms, or if recurrent or massive hemorrhage occurs, surgery is indicated.^{2,5,6,8,10,11} Massive hemorrhage or perforation will of course be a surgical emergency, and operation is mandatory in these cases. Uniformly good results are reported by various authors with simple excision of the diverticulum.^{1,5,6,8,13} Palmer,⁸ who collected 412 cases from the literature, found that 131 patients had been operated upon. He further pointed out the difficulty sometimes encountered in operating on juxta-esophageal gastric diverticula; in eight cases the diverticulum could not be found at laparotomy and in sixteen patients a subtotal gastrectomy was done. The easiest approach to this lesion is by way of a left rectus or a left subcostal incision and separation of the gastro-colic omentum and rotation of the stomach upward and to the right so that its posterior surface may be visualized. An indwelling Levin tube is sometimes of value in that the stomach may be inflated with air, thus making the diverticulum easier to see. Some authors, who have had difficulty in finding the diverticulum, have done an anterior gastrotomy and found the mouth of the diverticulum and have thus been able to identify the lesion. Some authors have recommended invagination and closure of the gastric wall over the defect and have reported good results,^{1,5,8,13} while Bralow and Spellberg¹ state that invagination is often inadequate treatment and recommend excision of the diverticulum with simple closure of the remaining defect. Thorough exploration of the abdomen, of course, is indicated and a search made for other lesions, which may be the true cause of the symptoms. Walters¹³ stresses a search for Meckel's diverticulum which often occurs in conjunction with the juxta-esophageal gastric diverticulum.

Prognosis

Prognosis is excellent and recurrence has not been reported. The patients get complete relief of their symptoms.

Case Report

R. D., a thirty-eight year old white male was seen in consultation on 3-8-56. He stated that he had vomited all his life; the spells of vomiting could



Figure 1: Juxta-esophageal gastric diverticulum outlined by barium and air.

not be attributed to any particular food, to nervous tension, nor to exertion, and there was never any hematemesis nor prolonged vomiting. The patient stated that vomiting was not accompanied by pain, and that he felt perfectly well as soon as he had vomited. In the past few years, the vomiting had decreased, but he noticed that he had pyrosis and water brash which seemed to be made worse by starchy foods and which was relieved by alka-seltzer. Greasy and fried foods seemed to aggravate these symptoms. He was frequently awakened at night by pyrosis but had no night pain. He had never had melena, colic, or constipation. In addition, he had a sensation of epigastric distention and fullness with a pressure sensation that ran from the epigastrium up into the retro-sternal area. There had been no weight loss. In his past history, the only thing of



Figure 2: Note retention of barium in gastric diverticulum. Also large diverticula of ascending colon.

significance was hepatitis, following a yellow fever inoculation in 1942. Subsequent studies of his liver function had been done repeatedly and had always been found normal. Physical examination was without significant findings. Cholecystogram with the oral use of telepaque showed a normally functioning gallbladder. An upper gastro-intestinal series showed a solitary gastric diverticulum in the juxta-esophageal area of the posterior wall of the stomach. There was normal pliability of the surrounding gastric wall and no tenderness in this area. The remainder of the stomach appeared entirely normal, as did the duodenum. There were multiple, large diverticula of the ascending colon. (Figure 1). There was retention of barium in the diverticulum twenty-four hours after ingestion. (Figure 2). The patient had been on medical management, consisting of

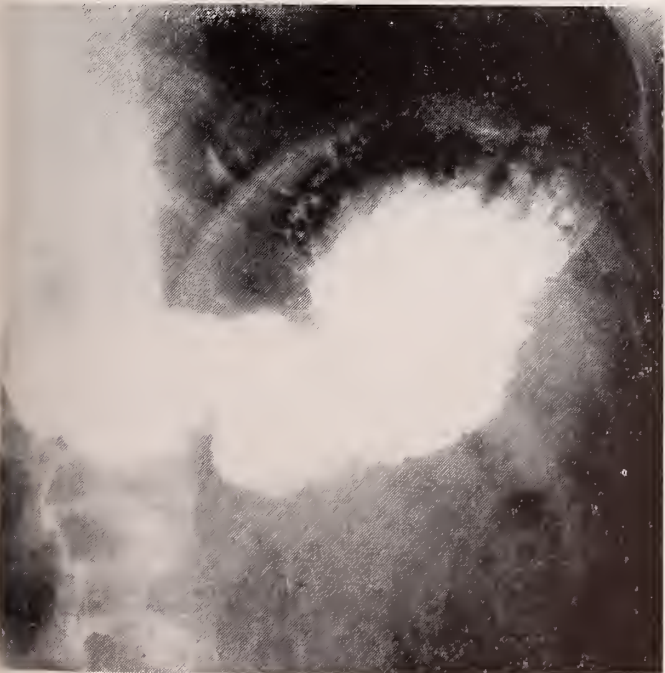


Figure 3: Excised gastric diverticulum.

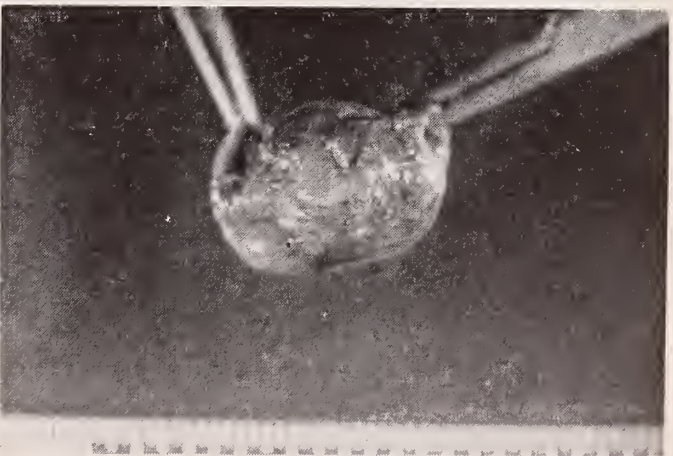


Figure 4: Postoperative roentgenogram of stomach.

multiple feedings of a bland diet, antispasmodics, and sedation without any benefit. The patient was admitted to the hospital, and the following morning under general anesthesia the abdomen was explored through an upper mid-line incision. The gastro-colic ligament was divided, and the stomach was rotated upward and

to the right, revealing a gastric diverticulum on the posterior wall of the stomach in the juxta-esophageal area measuring five centimeters in diameter. The neck of the diverticulum was dissected free of surrounding fat, a small clamp placed across the neck and the diverticulum excised. The defect was closed. The gastro-colic ligament was repaired and the abdomen closed. (Figure 3). The patient's convalescence was uneventful. Postoperative x-rays of the stomach, with the use of barium, showed that the diverticulum was no longer present. (Figure 4). The patient's symptoms were entirely relieved. He has been allowed to eat a general diet of his choosing. The patient has been followed for one year with no recurrence of symptoms.

Summary

Juxta-esophageal gastric diverticulum is rare and may be asymptomatic. Other upper abdominal lesions must be ruled out as a possible source of symptoms. This lesion can be the source of persistent or recurrent symptoms and at times hemorrhage or perforation can be life endangering.

An ulcer type of regime should be tried and if this does not relieve the patient, excision of the

diverticulum is indicated.

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THE MONTH IN WASHINGTON

RUSSIAN ADVANCES IN outer space have triggered a whole series of debates, not the least of which is the issue of the scope and extent of federal participation in higher education. From it may emerge at the very minimum a scholarship program benefiting pre-medical students and some medical students.

Here are some of the questions that Congress will have to answer before it writes a final bill on federal aid to higher education:

1. Should a program be limited to federal scholarships or should it include grant money for improving and enlarging colleges and universities, or for loans to students?
2. If it is limited to scholarships, should they be non-categorical in nature rather than favoring specific disciplines?
3. If non-categorical and thus benefiting all phases of higher education, how best to justify this approach in the national interest and national security?
4. Finally, if aimed at specific disciplines, should not Congress require some obligation for service on the part of the recipient?

Some of the answers have been given in the administration's plan now before Congress. As outlined by Secretary Folsom of the Department of Health, Education and Welfare, \$1 billion would be authorized over a four-year period. The money would go for 10,000 scholarships a year to bright students unable to finance their schooling, for National Science Foundation grants and fellowships for post-doctoral training and up to \$125,000 for any one school to improve facilities.

It has been explained that this program would benefit pre-medical students but that since scholarships would be limited to four years, students would have to find other ways to finance most of their years in medical school. After receiving their medical degrees, however, they would be eligible for the fellowships from the National Science Foundation.

The administration program favors the non-categorical approach, although preference would be given high school students with good preparation in math and the sciences. Students themselves would decide what college course to pursue.

The American Council of Education, which takes in nearly all accredited colleges, universities and junior colleges, told a House Education subcommittee that the 10,000 scholarships are "a minimum below which a program of effectiveness would be doubtful . . ."

The council outlined for the subcommittee these guiding principles:

1. The student should have complete freedom to choose his own program of studies within the requirements set by the individual institution.
2. Stipends up to a maximum amount set generally for the program should be sufficient to enable the student to attend an eligible college.
3. The student should not be denied the opportunity to attend any recognized college or university properly accredited under a regional accrediting association.
4. There should be no discrimination because of race, creed, color or sex.

ANESTHETIC STUDY COMMISSION REPORT

Three illustrative cases are presented which point out transgressions against the basic principles of good anesthesia. A review of 285 cases surveyed by the commission between July 1954 and December 1956 is given.

LESTER RUMBLE, JR., M.D., *Atlanta, Georgia*

IT IS DIFFICULT to make an unfavorable report without hurting someone's feelings. Nevertheless, a study commission of any sort would be without value if no attempt were made to point out errors that are being made, and sometimes repeated, in the area from which the commission draws its material. In considering this report, please be reminded that the mechanics of the Anesthetic Study Commission for the state of Georgia are so arranged that it is impossible for anyone to identify the patient, surgeon, or hospital involved.

This presentation is not a statistical analysis. Such analysis is not possible since returns have been inadequate, and since no mechanism is available whereby the number of anesthetics given in the state of Georgia is recorded. The purpose of this presentation is to give several cases typical of errors which are being committed in the field of anesthesia in Georgia today. It would be well to emphasize here that the errors pointed out are not errors about which there is any controversy. This is not a presentation of a discussion between anesthesiologists regarding what is best for a patient but an attempt to point out transgressions against the basic principles of good anesthesia.

The following three cases are indicative of preventable anesthetic mortality.

Case One

A thirteen year old male with a diagnosis of acute appendicitis was given morphine gr. 1/8 and atropine gr. 1/200 as premedication. On arrival in the operating room, induction was begun with trichlorethylene (trilene), following which the administration of ether was started. Both drugs were administered by open drop technique. After about 25 or 30 drops of ether had been added to the mask, cardiac action suddenly ceased. The only recorded attempt at resuscitation was the injection of adrenalin into the heart.

COMMENT: Trilene is not satisfactory for use by the open drop technique, nor is it considered a suitable induction agent under any circumstances. The depth to which a patient must be taken with trichlorethylene in order to produce sleep frequently leads to cardiac irregularities. It would have been preferable to start the anesthetic with open drop ether or with vinethene. Cardiac arrest occurred prior to incision and was treated inadequately. The injection of adrenalin into the heart through the closed chest has long since proven to be a worthless measure. The only treatment for a cardiac arrest is immediate thoracotomy, observation of the status of cardiac activity, and then manual massage directed at maintaining circulation until normal cardiac action can be restored. The administration of 100 per cent oxygen throughout this period is essential.

Case Two:

An 82 year old male with acute intestinal obstruction and marked abdominal distension was given demerol 50 mgm and atropine gr. 1/150 at 8:00 A.M. Ten minutes later, he was given 600 mgm of sodium pentothal intravenously and nasal oxygen was begun in anticipation of the performance of an exploratory laparotomy. Within a few moments, respiratory arrest occurred and was followed shortly by cessation of cardiac activity. Adrenalin was injected into the heart and an endotracheal tube was passed for positive pressure oxygen. Two ampules of coramine were given intravenously, and he was pronounced dead at 8:35 A.M.

COMMENT: Although an 82 year old man with intestinal obstruction is an extremely "poor risk" patient, it is our opinion that this death might have been obviated had not the anesthetic been mismanaged. Premedication should be given at least 45 minutes prior to the anticipated induction of anesthesia. If time does not permit intramuscular administration, whatever premedication is to be used should be given intravenously. The administration of the hypodermic at 8:00 and the induction of anesthesia at ten minutes after eight

ANESTHETIC REPORT / Rumble

is to be decried in any patient regardless of age. Secondly, the choice of pentothal and nasal oxygen as the sole agents in any patient for any type of surgery is not advisable. Intravenous barbiturates provide sleep, but do not provide analgesia or relaxation, except in overdosage. 600 mgm of sodium pentothal in an 82 year old individual, obviously quite ill, is certainly sufficient to produce respiratory arrest with subsequent anoxia and cardiac arrest. Resuscitative measures again were grossly inadequate, and the use of coramine under these circumstances indicated a complete lack of understanding of pharmacology as related to respiratory physiology.

Case Three

A 31 year old male received a shotgun blast through the left arm. His general condition on admission was otherwise good, and he had not been in shock. Blood pressure was 130/80 and there was a 3 x 4 skin defect in the upper left arm with injury to the brachial artery, median, and radial nerves. No laboratory work was done on the patient. He received morphine gr 1/6 and atropine gr 1/150 intramuscularly, and was taken directly to the operating room. Here he received 750 mgm of surital followed by nitrous oxide and oxygen. Cardiac arrest ensued within ten minutes of induction, and the operation was never begun, since an emergency thoracotomy was required. Cardiac massage was carried out for 45 minutes and ventilation with 100 per cent oxygen, but at the end of this time, the procedure was abandoned.

COMMENT: Here the same errors were made in premedication and induction. Though this was a young patient, he obviously had had some degree of blood loss, and certainly should not have been subjected to the precipitous administration of 3/4 of a gram of intravenous barbiturate. Secondly, since no other reason is apparent for the sudden cessation of cardiac activity, it must be presumed that anoxia was the precipitating factor. Resuscitation was proper up to the point of cardiac massage, but no mention is made of the administration of whole blood to correct a reduced blood volume which must have existed. Cardiac massage was abandoned within 45 minutes in a patient who had been otherwise normal prior to the event. It has become an established fact that cardiac massage should not be abandoned so quickly since successful resuscitations have been reported after as long as three hours of manual circulatory activity.

These cases are representative of the lack of attention that is paid to details which are so necessary for the success of any form of anesthesia. Undoubtedly, many patients are handled in this same manner every day without fatal outcome, and possibly for this reason, mistakes in premedication, choice of anesthetic agent, resuscitative measures, and post-operative care continue to be overlooked, simply because the majority of patients ultimately

regain consciousness and live. In July, 1954, the first request for information was sent out from the Anesthetic Study Commission. Through December, 1956, a total of 776 requests were sent. These requests for information are based on copies of death certificates which are sent to us by the public health department and include only those deaths which occur within 48 hours of surgery. During this same time, a total of 285 protocols have been returned to the Commission. This represents a return of 36 per cent. Table 1 shows the relative

District	Requests	Returns	Per Cent
5th	234	106	45
9th	33	14	42
4th	34	14	41
2nd	40	16	40
8th	43	16	37
10th	109	38	34
7th	83	24	29
1st	54	16	29
6th	81	18	22
3rd	65	12	18

Table 1: Relative rate of return from the 10 districts of the state.

rate of return from the 10 districts in the state. If the information of the returned protocol is sufficient, a decision is then made as to whether the death was preventable or non-preventable from the standpoint of anesthesia. These decisions are made by a group of the Anesthetic Study Commission members, or by individual members of the Commission. Of these 285 deaths, 51 have been determined to be definitely preventable from the standpoint of anesthesia. Thirty eight additional deaths were classified as questionably preventable, but in most of these instances, the information given did not warrant a definite decision. The remainder of the protocols either contained insufficient information to warrant discussion, or were

Total Requests	285
Per cent Return	36.7%
Preventable	51
Non-Preventable	137
Questionable Preventable	38
Insufficient Information	37
No Anesthesia Given	21
Blank Protocols	11
Total	285

Table 2: Classification of 285 study commission reports.

considered to be non-preventable deaths. (Table 2). In this group of 51 preventable deaths, there was an instance where a 16 year old primipara died from overdosage with ether anesthesia during the routine suture of an episiotomy. Another fatality occurred when respiratory obstruction took place during the removal of a substernal thyroid without endotracheal indubation. Still another death was

the result of aspiration of vomitus one half hour after the completion of surgery, the aspiration not being discovered until one hour after the patient's demise. Lack of proper post-operative supervision can be just as lethal as lack of proper anesthetic supervision.

To administer a perfectly good anesthetic without keeping an anesthetic record is not impossible. It was surprising to discover that approximately 50 per cent of the protocols returned to the commission did not contain a copy of the anesthetic record, and in many instances a statement was made on the protocol that no anesthetic record was kept as a routine. The absence of preoperative laboratory work was also rather astounding. In several instances, no pre-medication was given to the patient. All of these omissions lend the impression that too little attention is being given to the basic principles of anesthesia, thus leading to an unnecessarily high mortality rate. It is the hope of the Anesthetic Study Commission that interest may be aroused in correcting these deficiencies.

To further illustrate what is taking place within the state, the following report seems worthy of repetition. An 18 year old male weighing about 180 pounds was brought to an operating room with the diagnosis of peritonitis as the result of a ruptured appendix. The anesthetic was administered by a lay individual who has been giving anesthesia for the past twelve years under the supervision of a doctor. In this instance, the patient was given one gram of pentothal, and when relaxation did not occur, two cc of D-tubo curare was administered. Following this, open drop ether was begun and an additional one cc of D-tubo curare given. The stated reason for this choice of anesthesia was that "this was the type of anesthesia the anesthetist was accustomed to giving." During the time that the abdomen was being explored for the appendix, the patient suddenly "died on the operating table." There is no record of any attempt at resuscitation.

It is obviously impossible to place a fully qualified anesthesiologist or even nurse anesthetist in every area where anesthesia is given. It is not impossible to provide a physician in each area where surgery is performed who is well informed about basic principles of anesthesia. Such part-time physician anesthesiologists could do much to prevent such unfortunate occurrences as reported here. Much can be accomplished if the responsibility for the administration of anesthesia is placed in the hands of a well-trained surgeon or generalist who has taken the time to thoroughly acquaint himself with fundamentals of good, though basic, anesthetic techniques.

If the Anesthetic Study Commission is to be successful, a great deal more cooperation is needed over the entire state. There can be little reason for not filling out the protocol. A minimum amount of data is requested, but such data is necessary to properly evaluate a death at which one is not present. It is emphasized that the mechanics of the study commission make it impossible for anyone to be identified in connection with a mortality.

The classification of deaths as preventable or non-preventable has been barely satisfactory. Recently, a different classification of surgical mortalities has been offered, and it is proposed that this classification be adopted as a standard one for the tabulation of surgical mortalities.¹ The classification is as follows:

1. Death due to causes entirely within the anesthetist's province, i.e., the agent or technique.
2. Deaths probably of anesthetic causation.
3. Deaths due to a combination of anesthesia and surgery.
4. Deaths due entirely to surgery.
5. Inevitable deaths, or those deaths which are due to the patient's disease process, the course of which could not have been changed regardless of anesthesia and surgery.
6. Fortuitous deaths, or those deaths which occur that are of an accidental or coincidental nature.
7. Deaths unassessable despite adequate data.
8. Deaths unassessable due to inadequate data.

It would well be hoped that this or some modification of this classification could become a standard method of reporting mortality statistics in order that all may carry out the same classification of operative mortality.

Summary

1. Three case reports of deaths considered preventable by the Anesthetic Study Commission are presented in addition to other instances of errors in anesthetic management.
2. The classification of 285 protocols reviewed by the commission for the period July, 1954 through December, 1956, is given.
3. The request is made for better cooperation with the Anesthetic Study Commission as regards the prompt return of completed protocols.
4. Because of the lack of adequate data, no statistical analysis of these results is presented.

St. Joseph's Infirmary

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AN ESTIMATED 300,000 Georgians suffer from some form of the heart and blood vessel diseases which

cause more deaths in the state and in the nation than all other causes combined.

TREATMENT OF MYOCARDIAL INFARCTION WITH ANTICOAGULANTS

JOHN F. STEGEMAN, M.D., GOODLOE Y. ERWIN, M.D., and
JOSEPH B. NEIGHBORS, JR., M.D., *Athens, Georgia*

MORTALITY STATISTICS concerned with myocardial infarction have become steadily more encouraging, largely because of the widespread use of anticoagulants. Although statistical proof of its efficacy is difficult,¹ anticoagulant therapy has now passed the test of time that has refuted the skepticism expressed rather widely in its early days. There is now general accordance of opinion that such therapy should be used in essentially all "poor risk" patients, but otherwise there is considerable disagreement. Irving Wright and Henry Russek, for example, champion two opposing schools of thought. Wright and his associates² advocate widespread use of anticoagulants in virtually all cases where no specific contraindication is present, while Russek³⁻⁴ favors a careful selection of patients. The latter investigator argues that the mortality rate in "good risk" patients is so low, (3.5 per cent), and embolic phenomena so unusual, (four per cent), that anticoagulant therapy in this group is not worth the risk of hemorrhage. Most authors rule out the use of anticoagulants under a wide variety of conditions, such as history of any prior bleeding episode, ulcerative colitis, peptic ulcer, renal disease, hepatic disease, or cerebrovascular accident. It has also been suggested that the possibility of pericarditis should exclude its use.

The purpose of the present paper is to examine the danger factors and other problems involved in the use of anticoagulant therapy in the small general hospital. The study embraces a six-year period (1951 through 1956) and deals with the results obtained in 136 patients with acute myocardial infarction who were treated with anticoagulants. Not included in the study are those patients who died within 24 hours of admission. All cases in the study were the author's private patients, who were admitted to one of two small general hospitals of approximately 100 beds each.

The patients in the study were begun on anticoagulant therapy immediately following the establishment of the diagnosis of myocardial infarction

Favorable results with a low mortality rate may be anticipated with the use of anticoagulants in myocardial infarction if reasonable precautions are taken.

or when this was strongly suspected. Only those patients (not included in the study) who gave a history of significant hemorrhage, such as bleeding peptic ulcer or blood dyscrasia, were denied this treatment.

Technique

Virtually all of the 136 patients received their therapy according to the following procedure, with few departures from the standard. Intravenous heparin and oral dicumarol were begun simultaneously after an initial determination of the prothrombin time, and the former was continued (usually for 48 hours) only until the prothrombin time was satisfactorily altered by dicumarol. The dosage of heparin varied from 50 to 100 milligrams (5,000 to 10,000 units) every four to six hours, with the coagulation time calculated once or twice during the first two days. A clotting time approaching 15 minutes was considered acceptable. Dicumarol was usually given in a dosage of 300 milligrams the first day, 200 milligrams the second day, and a maintenance dose thereafter calculated according to daily prothrombin determinations. Toward the end of the series, other oral preparations than dicumarol were occasionally employed, but the same principles were followed.

Several methods were used in estimating the prothrombin concentration. In the early part of the study, the patient's prothrombin time was divided into that of the control, and was reported as "per cent of normal." This equation was not entirely valid in estimating prothrombin concentration, and the method was discarded. Later, dilution methods were used, and the physician attempted to regulate his patient at approximately the same level as that of control serum diluted to 30 per cent. However,

the authors found the most practical and expedient method was to maintain the prothrombin time between two and two and a half times that of the control. The length of time a patient was treated varied considerably, averaging about three weeks, until ambulation was accomplished.

No routine effort was made to check occult bleeding by microscopic urine sediment examination or by stool guaiac tests. However, signs of gross bleeding were carefully watched for.

Classification

The patients were arbitrarily (and retrospectively) divided into "poor risk" and "good risk" groups, roughly according to Russek's criteria,⁴ depending upon the findings on the first day of illness. If any of the following were present, the risk was considered poor: (1) intractable pain (2) persistent shock (3) heart failure (4) cardiomegaly (5) serious arrhythmia or block (6) presence of diabetic acidosis or other serious concomitant illness and (7) history of previous myocardial infarction. All other patients were considered good risks, regardless of age. According to these criteria, 76 of the 136 patients were classified as "poor risk" and 60 were "good." All were given full anticoagulant therapy.

Mortality

Of the 76 poor risks, 20 (27 per cent) died of their illness. Of the 60 patients considered good risks, one case proved fatal (1.7 per cent). The overall mortality rate was 15.4 per cent.

Hemorrhagic Complications

Of the 136 patients studied, seven (or five per cent) showed evidence of gross bleeding. Five of these required vitamin K therapy, and in the other two, cessation of anticoagulants alone was required. In nine other cases, Vitamin K therapy was given to correct a prolonged prothrombin time. No bleeding occurred in these cases.

Three of the patients who received vitamin K therapy for bleeding tendency eventually died. All three were autopsied, and in only one was hemorrhagic disease suspected as a contributing factor. This case is presented below. Of the other 18 fatal cases, none showed evidence of bleeding tendency or unusually prolonged clotting or prothrombin time.

Case One

A 65 year old man was admitted on July 26, 1952, with a history of recurrent chest pain of two weeks' duration. On the day of admission, and the day previously, the patient complained of severe sharp pain in the left chest. Serial electrocardiograms were typical of anterior infarction, and the patient was begun on depo-heparin, intramuscular, and dicumarol, in addition to

supportive measures. By August 10, the patient was considered to be making an uneventful recovery. On August 15, the patient developed nausea, vomiting, and pain in the right lower quadrant. A surgical consultant was called and found no evidence of appendicitis. The leucocyte count was 9,800, with a normal differential; the hemoglobin was 12.9 grams. The urine sediment contained 20-30 red blood cells per high powered field. The prothrombin time earlier in the day had been "30 per cent of normal." The NPN on the following morning was 77 mgm. per cent. On August 17, the prothrombin concentration had suddenly dropped to "0.09 per cent of normal." Vitamin K, 100 mgm. intravenously, was ordered every four hours, but shortly before the patient was to get his second dose, he suddenly complained of severe chest pain, and expired.

Autopsy was limited to the chest and abdominal viscera. The positive findings included dissecting aneurysm of the thoracic aorta, fibrinous pericarditis, and myocardial infarction. Massive hemopericardium was present.

Hemorrhagic tendency was usually first noted in the form of epistaxia or melena. One case exhibited unusual signs of hemorrhagic complication to anticoagulant therapy, and is present below.

Case Two

A 44 year old man, previously in excellent health, was wakened shortly after retiring on April 26, 1956, with crushing substernal pain, and was brought to the hospital in a state of shock. Serial electrocardiograms were characteristic of acute posterior infarction. The patient was immediately begun on levophed and intravenous heparin, and the following morning dicumarol was added. His response was excellent, and within 24 hours, his condition was satisfactory. Convalescence continued without incidence until 6:00 p.m., May 18, when he suddenly developed pain in the right lower quadrant. The leucocyte count was 17,950, with 78 per cent polymorphonuclear forms. The prothrombin time 10 hours earlier had been 32 seconds, against a control of 15. A surgical consultant suspected early appendicitis, but advised against immediate operation. The prothrombin time was re-checked at 7:00 p.m. and found to be one minute and 15 seconds, against a control of 15 seconds (a 10 per cent dilution control being 42 seconds). This was all the more note-worthy since the patient had received 50 milligrams of mephyton (vitamin K) two hours previously after an intern had noted fresh blood on the patient's gums. A diagnosis of intra-peritoneal bleeding secondary to dicumarol poisoning was made, and the patient was given 100 mgm. mephyton intravenously. Three hours later the patient felt considerably better, and the following morning was entirely free of symptoms. At this time, the prothrombin time was 18 seconds against a control of 14. Thereafter, the patient's convalescence was uneventful, and he was discharged three days later.

MYOCARDIAL INFARCTION / Stegeman

Summary

In a series of 136 patients treated with routine anticoagulant therapy over a six year period in two small general hospitals, there was one mortality (0.7 per cent) partially attributable to hemopericardium, a questionable result of dicumarol effect. This patient also had a dissecting aneurysm and myocardial infarction. There were six other cases that showed external evidence of bleeding. All responded promptly to treatment. In nine other cases, vitamin K in some form was used to correct a prolonged prothrombin time, but no bleeding occurred in these cases.

Conclusion

With reasonable watchfulness, and with the help

of laboratory facilities for determining clotting and prothrombin times, anticoagulant therapy can be carried out in a small hospital with a high degree of safety.

1010 Princeton Avenue

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PITUITARY APOPLEXY

Sudden hemorrhage within previously unrecognized pituitary tumors may produce extensive irreversible damage unless suitable surgical decompression of the sella is instituted.

Three illustrative cases are reported.

FLEMING L. JOLLEY, M.D., and ROBERT L. MABON, M.D., *Atlanta, Georgia*

THE ABRUPT ONSET of mental confusion, stupor, or coma is usually associated with some catastrophic vascular upsets within the cranium. Certainly, such sensorial changes are much more frequent with aneurysmal ruptures. However, it is well established that these may be resultant of hemorrhages within previously unrecognized tumors.

As a small, yet important, facet of this problem we should like to present three cases of apoplectic vascular changes in previously unrecognized pituitary tumors. Recovery incidence from such lesions is suggested to be increasing as recorded in recent literature reviews. Unfortunately, irreversible damage may occur in such lesions which decreases the salvage rate. This was true in our three patients. The diagnosis, of course, still rests with the index of suspicion. The infrequency of this lesion lends itself to latent diagnosis.

The history of this particular pituitary apoplexy lesion was first recorded in 1905 in a review by Bleibtrau. An excellent survey as to pathology and clinical variation is recorded by Brougham, Heusner, and Adams.¹ Subsequent reviews by Fountain, Baird, and Poppen² and also by List, Williams and Balyeat³ have covered the variations in the clinical pattern exceedingly well.

The sequence of pathological events within the pituitary gland and its neighboring structures parallels a clinical course of symptoms and neurological deficits with moderate variations. Initially, the pituitary lesion is of either chromophobe or acidophilic cellular type. Each of the three cases in our report were of a chromophobe type. In one case the hemorrhage had so replaced tumor tissue that no discrete cellular arrangement persisted. Two apparent processes occur in these cases. It is suggested that these may be independent by predominance of that particular pathological picture. These changes are necrosis, and hemorrhage. Each of these happenings are thought to be the result of

rapid growth whereby the normal blood supply is out-distanced.

What happens to this now enlarging mass within the pituitary capsule? One, if capsular structure is maintained without rupture, immediate adjacent compression on the optic nerves, chiasm, or tract will induce visual changes. These changes primarily result in varying degrees of visual range interferences. Laterally, by actual cavernous sinus compression, ocular palsies may occur. More commonly this will be a third nerve palsy, but either a fourth or sixth nerve palsy may occur. Carotid artery compression may also occur as a result of this lateral extension. Finally, hypothalamic compression may occur directly from the pituitary expansion from sella level upward and posteriorly. Two, if rupture of the capsular structure occurs, a clinical picture of spontaneous subarachnoid hemorrhage is induced. This may be with or without lateralizing signs. Here again the amount of bleeding and increased intracranial pressure determines the neurological symptoms.

In establishing the diagnosis, plain skull X-rays usually give one a clue when the rather characteristic pituitary tumor sella turcica changes are noted. In individual selected cases, angiography and ventriculography may prove helpful. Cerebro-spinal studies may be normal or reveal increased intracranial pressure. The fluid may be clear or it may be bloody or varying degrees, depending upon the volume of the hemorrhage.

The following pertinent details of our three cases were as follows:

Case One

A 44 year old man was seen in consultation on 1-15-56 because of sudden blindness. This patient had been hospitalized the preceding day because of continued nose bleed. This had begun approximately seven days prior to his admission, associated with pharyngitis and cough. In spite of

PITUITARY APOPLEXY / Jolley

intranasal cauterization by an otorhinolaryngologist, the nose bleed had continued. In addition, during the preceding several days the patient developed nausea, vomiting, and severe headache.

The sudden blindness had occurred at about 2:15 A.M. on the day following admission (1-16-56). He complained of severe increasing headache which he primarily localized to the frontal and suboccipital region. Blood pressure as recorded on hospital admission was 124/70, pulse 88, respiration 18, and temperature 102.4°. The left pupil was smaller than the right. Neither pupil reacted to light or accommodation. The extra-ocular movements were normal. No true edema of the optic nerve heads existed. Two snow white exudates medial to the left disk were present. An anosmia on the left was present. A small amount of liquid blood filling the posterior pharynx was noted. The neck was supple. The deep tendon reflexes were reduced, but bilaterally equal. Lumbar puncture showed grossly bloody fluid. The skull X-rays revealed a sella turcica to be slightly above the upper limits of normal size. Some tenting of the dorsum sellae existed. He deceased eight days after entering the hospital with a continued 104-105 degree temperature. It was felt the clinical picture was prohibitive to surgical efforts.

At autopsy, upon removing the brain, it was found that there was a rounded tumor of dark red tissue which protruded from the sella turcica. The tumor measured 4.5 x 3 x 2.5 centimeters. The optic chiasm and nerves were compressed over the superior surface of this tumor. The lesion extended into the naso-pharynx superiorly and extended over the levels of the cavernous sinuses. The tumor impinged upon the inferior surface of the frontal lobe. There was evidence of an original encapsulation. No pituitary gland, as such, was recognized. The sella turcica measured 2 x 1 x 1 centimeters. The tumor was soft and necrotic and fell apart when sectioned. The brain weighed 1700 grams. The tumor mass weighed 30 grams. The only other significant finding at autopsy was that of a terminal bronchopneumonia. Microscopic section of the pituitary lesion was suggestive of a pituitary tumor. It was so degenerated that classification and detailed histology was not possible.

Case Two

A 46 year old man was seen on December 20, 1955. No detailed past history was available. There apparently had been some difficulty with vision previously. He had not sought a medical opinion for this. He had complained of severe headaches during the past few weeks. On the evening of December 19, 1955, he became somewhat stuporous complaining of much severer headache. This continued until hospitalization. On examination blood pressure was found to be 150/80. The patient could be aroused only by painful stimulus. There was noted to be some sagging of the right side of the mouth. There was

questionable weakness of the right side of the body. The deep reflexes in the right upper extremity were more active than the corresponding over on the left. The deep reflexes in the lower extremities were active and equal on both sides. There was an extensor response to plantar stimulation on the right and minimal response to this maneuver on the left. On fundusoscopic examination it was noted that both optic disks were very pale. No evidence of papilledema was present. The pupils were miotic but responded well to light. No stiffness of the neck was noted. Skull and chest X-rays were obtained on the day of admission. The chest film was normal. There was in the skull X-ray a complete destruction of the sella turcica with the exception of the anterior clinoid process. Absence of the floor of the sella turcica, the posterior clinoids, and upper portion of the dorsum sellae was consistent with an unusually large intrasellar pituitary tumor diagnosis.

On December 21, 1955, ventriculography was performed through posterior parietal trephines. In the AP projection, these demonstrated a definite elevation and central separation of both lateral cerebral ventricles. This, as if by an enlarged midline suprasellar extension of tumor. No shift of the ventricular system was noted from its midline position. A left transfrontal craniotomy followed ventriculography. The operative note describes as follows: "Upon coming down in the region of the pituitary fossa and the optic chiasm, we found a very large bluish-purplish tumor in the region of the pituitary gland approximately the size of a hen's egg or possibly even larger. The optic nerves were stretched tightly around the lateral margin of the lesion like taut bow-strings. Aspiration of this lesion was attempted, and a small quantity of old blood was encountered. The tumor cyst was then opened, and a moderate quantity of grumous material was removed and we were obviously dealing with a solid tumor. In retrospect, we possibly could explain this patient's sudden difficulty Monday due to the fact that he might have had a hemorrhage in this particular lesion, giving him his acute symptoms because obviously this lesion has been present for many months."

The patient did not improve from surgery and died on the afternoon of December 23, 1955.

At autopsy, on gross inspection, the brain appeared quite edematous. An oval tumor measuring approximately 5 x 3.5 centimeters was located in the sella turcica and occupying the area encircled by the Circle of Willis. In the left frontal lobe an area of softening with degeneration existed. The inferior surface of the brain extending to the cerebral peduncles showed compression due to the pituitary tumor. In this region areas of hemorrhage were noted. A prominent herniation "cone" of the cerebellar tonsils existed.

The pathologic description of the tumor, which had been detached, was that of a fairly well encapsulated one except on the inferior surface where previous extension into the sella turcica

existed. An area of hemorrhage was visible on the surface. Bisection of the tumor specimen showed it to be diffusely hemorrhagic.

Microscopically the tumor revealed that the major portion of the tumor's outer aspect was covered by a uniform fibrous capsule which in some areas was infiltrated by tumor cells. These likewise appeared in more loose fibrous tissue beyond the actual capsule. An occasional spicule of bone was also seen in that particular area. The tumor itself showed extensive hemorrhage and necrosis and the cells were poorly preserved. In the relatively better preserved portions, the tumor consisted of a mass of round, dark, uniformly small nuclei without discernible cytoplasm. No particular pattern existed. A pale staining stroma was seen between the nuclei. In the intact portions, increased vascularity was not remarkable.

Case Three

A 55 year old man was initially seen on January 31, 1955. It was said that he had arterial hypertension. He had slipped and fallen on an icy walk on January 30, 1955. He continued for several hours and finished out his working day. He did require help to get home because of a complaint of an inability to see. He was put to bed. His wife said that she thought he could move the right extremities better than the left.

When he did not awaken at his usual hour the following morning, January 31, 1955, members of the family sought to arouse him but could not do so. He was brought to the emergency clinic in such a state. Temperature was 105 degrees; respirations were depressed. Pulse was 56 to 58 per minute; blood pressure was not obtainable. The only response was that to deep tendon or supraorbital pressure. This activated a spastic type withdrawal movement of all four extremities. The right extremities appeared to be more active in this movement. He had a pupillary inequality with the right dilated and fixed; neither reacted to light. Bilateral hyperactive deep tendon reflexes were obtained; the left ones were more active. Bilateral Babinski responses were obtained. A tracheotomy was performed.

AP and lateral skull projections were obtained which demonstrated the bony structures of the calvarium to be intact. No evidence of fracture line was noted. It is noted in these films that the sella turcica is not well defined which was interpreted at the time as possibly due to rotated projection.

Because of the history of trauma with suggested lateralized findings and the critical situation, the patient was carried to the operating room where bifrontal and biparieto-temporal trephinations were carried out. No subdural or extradural hematoma was encountered. The visible portion of the brain at trephinations indicated increased intracranial pressure. No further surgical endeavors were attempted.

The patient died the same day of hospitalization. This was preceded by vomiting a large amount of coffee ground material.

Autopsy was performed. The brain after fixation appeared of normal configuration. Minimal arteriosclerosis of the vessels at the base of the brain was described. The meninges appeared injected. There was a marked cerebellar pressure cone. In the region of the infundibulum there was a rounded 3 x 5 centimeter depression upon the inferior surface of the frontal lobes. The pituitary gland was replaced by a tumor which bulged between the optic nerves. It was reddish in color, soft, and encapsulated. The diaphragm of the sella was stretched and encircled the tumor in its central part. The optic nerves, chiasm, and stalk were compressed. The sella was markedly enlarged and represented by a semi-globular recess with a diameter of three centimeters. The roof of the sphenoid sinus over an area of one centimeter in diameter was eroded. The sphenoid sinus measures 0.5 centimeters in depth. On microscopic examination, the tumor was made up of small polygonal to round cells with uniform small round nuclei. The cells were in a loose epithelial arrangement. In the center were cavernous blood spaces surrounded by large areas of hemorrhage. Some groups of tumor cells in this hemorrhagic center were necrotic. Other autopsy findings included a hamartoma of the left kidney which was located in the upper pole on its posterior surface. There was hypertrophy of the prostate gland. An ulcer measuring 0.5 centimeters in diameter was found in the cardiac portion of the stomach.

Now in regards to treatment of these pituitary apoplexies, it is felt that surgical decompression of the sella contents offers the most in each individual situation. However, as demonstrated in our cases, it would seem that surgical intervention should be elective. It is felt that early surgical intervention in such cases is probably contraindicated, although one may find it necessary in cases of sudden blindness, particularly if such a complication is secondary to irradiation therapy. The reasoning for more conservative approach to surgical intervention is initially the added stress of surgery on the already critically ill individual. Further, often there is in these patients a complicating panhypopituitarism. This latter may be subclinical in the previously undiagnosed pituitary adenoma.

Pre-operative preparation of the individual by adequate administration of cortisone is advisable routinely. Testosterone and/or thyroid may be warranted. Intravenous administration of compound F (cortisone preparation) may be given until intramuscular cortisone preparations retain their effect. Certainly this offers help in the individual requiring more immediate surgery.

However, as demonstrated in the pathological material of the three cases herewith reported, damage accomplished by the lesion may prove irreversible despite any efforts towards sella-chiasmal decompression of the affected areas.

Summary

1. Three cases of pituitary apoplexy are presented with their pathological findings. Each of these occurred in undiagnosed pituitary adenomas. One must assume that the pituitary adenoma had not caused sufficient difficulties for these patients to seek medical attention.

2. A review of the pathological aspect with clinical variations are presented.

3. It is felt that surgical intervention in the previously undiagnosed pituitary adenomas must necessarily be more conservatively approached because of difficulty in obtaining the diagnosis, signs, and symptoms of pituitary insufficiency, and the vital status

of the individual. Such problems, as presented in the three cases here reported, should not be confused with that of spontaneous hemorrhage into a pituitary tumor of an individual currently undergoing roentgen therapy.

478 Peachtree Street, N.E.

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ATLANTA IS SCENE OF DIABETES POSTGRADUATE COURSE

THE AMERICAN DIABETES ASSOCIATION held its sixth postgraduate course in diabetes and basic metabolic problems in Atlanta, January 22-24, 1958, at the Academy of Medicine Building. Attending the course were some 200 physicians from the United States, Canada, and Cuba.

Present for the occasion and a member of the faculty was Dr. Charles H. Best, co-discoverer of insulin. Dr. Best is now professor of physiology at the University of Toronto and director in the Banting and Best Department of Medical Research. In his talk to the group Dr. Best gave a brief review of how he and Sir Frederick G. Banting discovered the drug in 1921 and discussed the advancements being made in the treatment of diabetes.

Other members of the faculty included many well-known national authorities on diabetes. Medical As-

sociation of Georgia members who participated in the program were Walter L. Bloom, Atlanta, Thomas Findley, Augusta, Arthur M. Knight, Waycross, Arthur J. Merrill, Atlanta, and Paul L. Schroeder, Emory University.

Subjects considered in detail during the conference included "Hormonal Influences in Diabetes Mellitus," "Special Considerations in Diagnosis," "Treat," "Problems Encountered in the Treatment of Diabetes," and "Stress and Strain." Also featured was a panel discussion open to the public on the subject of "Living With Diabetes." Five of the visiting specialists composed the panel.

Christopher J. McLoughlin, Atlanta, was director of the postgraduate course. Associate directors were Raymond Arp, Emory University, and Walter L. Bloom, Atlanta.



Figure 1: 200 physicians from the United States, Canada, and Cuba registered for the sixth postgraduate course in diabetes and basic metabolic problems held in Atlanta recently in the Academy of Medicine Building.



Figure 2: Christopher J. McLoughlin, Atlanta, director of the postgraduate course discusses the meeting with John A. Reed, Washington, D. C., president of the American Diabetes Association. Dr. Reed was a member of the faculty for the Georgia meeting.

MANAGEMENT OF ACUTE CHOLECYSTITIS

There is more confusion than actual fact in the belief that many surgeons recommend nonoperative management of acute cholecystitis. This review points up the difficulty of evaluating the degree of inflammation in acute cholecystitis from symptoms, signs, or laboratory data.

JOHN E. SKANDALAKIS, M.D., and CHARLES S. JONES, M.D., *Atlanta, Georgia*

SINCE THE APPEARANCE of Heuer's¹ report in 1937 on the surgical management of acute cholecystitis there has been much discussion in the surgical literature on this aspect of gall stone disease. Many doctors, particularly internists, believe that there are two opposing approaches; one approach contends that acute cholecystitis should be managed non-operatively and is, therefore, a medical problem; the other advocates early operation in acute cholecystitis.

Upon examining the literature, however, one finds that there is general agreement that acute cholecystitis is a surgical problem. Most agree that within the first 48 to 72 hours of the disease a prompt cholecystectomy is indicated: Cole,² Buxton, Ray and Coller,³ Glenn,⁴ Ochsner,⁵ and Heuer.¹ There is a difference of opinion as to how best to manage those cases who have had symptoms longer than 72 hours. Below are listed some of the methods advocated for the management of acute cholecystitis when seen late in the course of the disease:

1. In the more advanced stages of inflammation, cholecystectomy should be delayed because dissection is uncertain and there is danger of damaging the common bile duct.
2. A deliberate cholecystostomy should be done in the cases with symptoms longer than 72 hours because cholecystectomy is too risky.
3. The patient who has had symptoms longer than 72 hours should be treated expectantly and operated upon only if symptoms and physical signs indicate progression of disease.

This report concerns a group of patients with acute cholecystitis seen and operated on at the Saint Joseph's Infirmary in Atlanta, Georgia.

Material

There were 56 cases of proved acute cholecystitis

operated on between January 1, 1946 and December 31, 1955. (*Table 1*)

Jan. 1, 1946 - Dec. 31, 1955	
	Number
Patients Discharged from hospital with diagnosis of Acute Cholecystitis	112
Patients who had operation	81
Patients whose diagnosis was confirmed by pathological examination or who had a cholecystostomy	59

These cases have been analyzed, and an effort made to determine any reliable symptoms, signs, or laboratory reports which would suggest gangrene or perforation. In all cases the diagnosis was established by the gross appearance of the gall bladder at the time of operation and the pathological appearance under the microscope. In 57 cases stones were present; no stones were found in two cases.

The average age of the patients was 52.9 years. Thirty-one or 53 per cent were female and 28 or 49 per cent male. The average age of the females was 49.7 years, and of the males 56.5 years. (*Table 2*)

AGE AND SEX DURATION			
Age	Male	Female	Total
21-30	1	4	5
31-40	1	4	5
41-50	7	11	18
51-60	10	5	15
61-70	7	6	13
71-80	1	0	1
81-90	1	1	2
Total	28	31	59
Ave. Age	56.5	49.7	52.9

Of all the cases 60 per cent gave a past history strongly suggestive of gall stone disease and 17

ACUTE CHOLECYSTITIS / Skandalakis

per cent had had a gall bladder series showing stones or a nonfunctioning gall bladder. (Table 3)

PAST HISTORY

Patients who had gallstones	60%
Patients who had non-functioning gallbladder on X-rays	17%

At the time of admission all patients complained of right upper quadrant tenderness and spasm on physical examination. These symptoms and signs were the only consistent findings in all cases. Only 14 cases or 24 per cent had a right upper quadrant mass on physical examination.

At the time of admission 46 per cent of the patients had a temperature of 99° F or less. Twenty-seven per cent had a white blood count of 10,000 or under, and only 17 per cent had a white blood count of over 15,000 per cu. mm. (Table 4)

PHYSICAL EXAMINATION

Mass in R. U. Q.	24%
99° Temp. or less	46%
10,000 W. B. C. or less	27%
15,000 W. B. C.	17%

In studying the duration of symptoms prior to hospitalization it was found that five cases were admitted within six hours of onset. This is eight per cent of the total. Thirty-two cases or 63 per cent had had symptoms for 72 hours or less, while 20 cases or 35 per cent had had symptoms longer than 72 hours. In two cases the time interval was not recorded. (Table 5)

DURATION OF SYMPTOMS PRIOR TO HOSPITALIZATION IN 59 CASES

Time of Adm. after onset	Percent (No.)
1-6 hours	8.0% (5)
6-72 Hours	54.0% (32)
72 Hrs. or more	35.0% (20)
Time not recorded	3.0% (2)

The cases here reported were collected from a private hospital staffed by a number of surgeons. There is no set policy in the management of acute cholecystitis. It is interesting to study the time interval between admission and operation, when operation was done. Thirty-five cases or 60 per cent were operated upon on the day of admission. In 20 cases operation was delayed longer than 24 hours for an average delay of six days. In four cases operation was delayed for longer than 10 days. (Table 6)

TIME OF OPERATION AND SURGICAL FINDINGS

Time	No. of Patients	Gangrene or Perforation
12-24 Hrs.	35	10
24 Hrs.-10 Days	20	2
Total	59	13 (11 M. - 2 F.)
Mortality	0	

In other words, 40 per cent of the operated cases were first treated expectantly, but their subsequent course rendered this inadvisable and operation was performed. In three of these delayed cases there was perforation or gangrene which was not suspected preoperatively. In two of these cases operation was delayed for six days, and one for 12 days after admission to the hospital.

Type of Operation

Of this group 50 patients had a cholecystectomy. Five of these had a common duct exploration in addition to removal of the gall bladder. In nine patients or 15 per cent a cholecystostomy was done. (Table 7)

SURGERY IN 59 CASES OF ACUTE CHOLECYSTITIS

Type of Operation	Per cent—No.
Cholecystectomy	76.3% (45)
Cholecystectomy & Exploration C. Duct	8.5% (5)
Cholecystostomy	15.2% (9)

The average age of patients having cholecystostomy was 68.5 years. Two of the cholecystostomy group had a perforated gall bladder, one had gangrene, and two had what was grossly described as empyema.

Complications

There were five major postoperative complications in this series. They were: One retained common duct stone, one subphrenic abscess, one paralytic ileus, one wound abscess, and one unexplained 15 day febrile course. (Table 8)

POST OPERATIVE COMPLICATIONS IN 5 (8%) OUT OF 59 PATIENTS

No. of Pts.	Time	Type of Complication
1	24 Hrs.	Wound Abscess—G. & P.*
1	24 Hrs.	Subphrenic Abscess—G & P
1	6 days	Ret'nd C. D. stn. G. & P.
1	6 days	Paralytic Ileus G. & P.
1	12 days	Unexplained Febrile Course
G—Gangrene		P—Perforation

On the first four cases gangrene or perforation of the gall bladder was found at the time of operation.

Morbidity

The morbidity in this group has been appraised in terms of the duration of postoperative hospital stay. Thirty cases or 51 per cent remained in the hospital for less than 10 days after operation; 19 cases or 32 per cent between 10 and 15 days, and 10 cases or 17 per cent were in the hospital for 15 days or longer after operation. (Table 9)

MORBIDITY IN 59 CASES OF ACUTE CHOLECYSTITIS		
Days	Per cent	No.
1-9	51%	(30)
10-15	32%	(19)
16 or more	17%	(10)

Mortality

There were no deaths in this series.

Comparative Study

An effort has been made to appraise the clinical data in these cases to determine whether or not there were any reliable indications to suggest gangrene or perforation. In 1937 Heur¹ pointed out that the pathological course in acute cholecystitis did not necessarily parallel the clinical course. He further stated that the gall bladder may progress to gangrene and perforation in the setting of improving symptoms, lessening signs, and a falling white blood count.

	Whole G. or P.	
Symptoms		
72 hrs or less	63%	77%
WBC 10,000		
or less	27%	30%
Temp. 99°		
or less	46%	54%

Table 10 shows a comparison of symptom duration and signs as well as white blood counts upon which one might depend in appraising the progress of inflammation within the gall bladder. From this table one finds that 77 per cent of the cases having gangrene or perforation had had symptoms less than 72 hours, 54 per cent had a temperature of 99° F. or less, and 30 per cent had a white count of 10,000 WBC per cu. mm. or less.

Cole,² Buxton, Ray and Coller,³ and Ochsner⁵ have all advised that those patients seen late in the course of acute cholecystitis be treated expectantly. They further recommend operation if the clinical course of the patient suggests progression of the disease. This, of course, is sound advice. However,

in this series of cases we were unable to determine from symptoms, physical signs, or laboratory data which cases had the more advanced inflammatory process.

As previously stated 24 cases in this series were not operated upon on the day of admission. This is 40 per cent of the total group. The average delay from admission to operation was six days. These patients were operated on because their clinical course was deemed unsatisfactory and because of the possibility of progressive inflammation within the gall bladder. Three of this late operated group had gangrene or perforation. The remaining had the simple inflammatory process. Of the three with gangrene or perforation, two had a normal temperature, and two had a white blood count of 14,000 at the time of operation. All three were admitted to the hospital within 48 hours after onset of symptoms. They were treated for six days, 12 days, and six days before a decision was made to operate.

Discussion

There exists today some confusion in the minds of physicians and surgeons as to the proper method of management of acute cholecystitis. Acute cholecystitis is a common complication of gall stone disease occurring in 20 to 25 per cent of patients having gallstones. Its frequency is further emphasized when one considers that about 25 per cent of adults over the age of 40 years have gallstones. Some of our soundest surgical teachers may be unwittingly promoting confusion in their efforts to advocate conservative surgical approach. There is a generally accepted belief that Coller and Cole, for example, advocate expectant treatment in acute cholecystitis. From articles quoted earlier in this report it will be seen that both of these men advocate operation in cases seen early and advise close surgical observation in those seen later in the course of an acute episode.

The initial pain in acute cholecystitis is usually severe and requires medical care within 12 to 36 hours. If these patients came under surgical observation at this time, an accurate diagnosis and early operation might be carried out well in advance of the 48 to 72 hours "deadline." This would eliminate much of the present day confusion because few cases would fall in the late group.

In the present series of 59 cases of acute cholecystitis 13 or 22 per cent had gangrene or perforation at the time of operation. This figure corresponds closely with that given by Heuer,¹ in 1937, which was 20 per cent. This suggests that the antibiotics have not been effective in combatting this inflammatory disease.

Most investigators now agree that acute cholecystitis is primarily an obstructive disease. In the

ACUTE CHOLECYSTITIS / Skandalakis

early stages the inflammatory reaction is due to chemical irritation. Bacterial invasion is considered to be a secondary factor.

Careful examination of the cases showing gangrene or perforation failed to reveal any symptoms, signs, or laboratory study which would reliably predict the pathological process within the gall bladder. True, a higher percentage of the cases had an elevated white blood count, but 30 per cent had a near normal count. Only 30 per cent of the advanced cases had a temperature elevation above 100° F. Fifty per cent of these cases were operated upon within 72 hours of onset of symptoms. While some cases presented the typical picture of advanced inflammatory disease, others were quite deceiving.

These findings suggest that early operation may be required in most cases of acute cholecystitis in order to discover and properly treat those with gangrene or perforation. A routine cholecystectomy is not to be advised in all cases. In those patients who are a poor operative risk, or where technical difficulties are encountered, a cholecystostomy is the procedure of choice. It is sound procedure for a surgeon to "back-out" at any point when he does not feel that he has satisfactory control of the situation. In such a case, that portion of the gall bladder which has been dissected from its bed can be removed; the remaining portion should be left open and drained. If there is suspicion of a common duct stone and the common duct cannot be visualized, then a cholecystostomy should be done during the acute episode. This will permit an interval cholangiogram to be done, and will relieve obstruction so that the inflammatory reaction will subside. Ross, Boggs and Dunphy,⁶ studied a series of acute gall bladders pathologically and attempted to correlate the inflammatory reaction with the clinical picture. They found that the inflammatory reaction subsided in a varied and unpredicted fashion. This could not be correlated with the clinical picture. Some cases showed acute inflammation months after the onset of symptoms in patients who were essentially symptom free at the time of operation. With cholecystostomy, including removal of the stone impacted in the neck of the gall bladder, obstruction will be relieved. The inflammatory reaction will then subside more quickly and with less potential danger

to the patient.

Common duct injuries, hepatic artery ligation and uncontrolled bleeding usually result from the hurried and blind gestures of a surgeon who does not have complete control of the operative procedure.

In our constant efforts to reduce surgical mortality to zero, it might be advisable to emphasize that acute cholecystitis is a surgical problem. Early temporizing procedures in the hope that the inflammatory reaction will subside are uncertain and may be dangerous. All patients should be seen early by the surgeon. When the diagnosis is definite, the patient can usually be operated on with safety. Cholecystostomy should not be considered a mark of inferior surgical skill, but rather a sign of mature surgical judgment.

Summary

(1) Fifty-nine cases of acute cholecystitis are reviewed. All cases were operated on without a death.

(2) Of the group 22 per cent were found to have gangrene or perforation.

(3) No symptoms, signs, or laboratory studies were found which would reliably indicate perforation or gangrene of the gall bladder.

(4) It is suggested that early operation, but not necessarily cholecystectomy, is the safest procedure in acute cholecystitis. This should be done when the diagnosis is definite, and satisfactory preoperative preparation has been carried out.

(5) It should be emphasized that early temporizing procedures in acute cholecystitis are uncertain and dangerous. There is a wide zone of agreement that acute cholecystitis seen early is a surgical problem and best treated by early operation.

1968 Peachtree Road

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FEBRUARY IS GEORGIA HEART MONTH

GOVERNOR MARVIN GRIFFIN has proclaimed February as Heart Month in the state of Georgia. In issuing the proclamation the Governor urged "all citizens to support the Heart Fund Drive, and all

schools, churches, scientific, civic, social, and fraternal organizations and business establishments to give the greatest possible support to the Georgia Heart Association in this campaign."

PULMONARY BIOPSY: AN OFTEN NEGLECTED DIAGNOSTIC APPROACH

IT HAS BEEN the experience of all of us that in determining a definite diagnosis in an obscure chest lesion, in the final analysis much time has been needlessly lost. Diffuse infiltration of the lung may occur in infections, idiopathic diseases, malignancies, cardiovascular lesions, or trauma. In many of these, the diagnosis can be established without difficulty; however, in a considerable number of them, despite extensive diagnostic studies, the diagnosis cannot be accurately made. Recently in the *Journal of the American Medical Association*¹ Andrews and Klassen reported an eight year experience which involved pulmonary biopsies on 118 patients. Complications were reported in only fourteen of these cases, the majority of these being pneumothoraces, minor hemothoraces, and/or intercostal neuralgia. During the past three years fifty biopsies were performed with only two complications and both of these being pneumothoraces which were easily controlled by the application of suction through intra pleural catheters. The authors found the most common diffuse lesions to be those of primary or metastatic malignancies and chronic pulmonary infections. Pneumoconiosis was found in less than half of the patients who were suspected to have this lesion.

Even in patients who are considered to be relatively poor risks for surgery, often times this procedure can be done with little difficulty and discomfort to the patient. It is a simple matter to pre-medicate these patients and after anesthetizing the oral pharynx, and upper trachea, to insert the proper sized endotracheal tube and safely and satisfactorily administer a general anesthetic. A small incision can then be made in the anterior or lateral chest, depending upon the location most desirable to biopsy. A portion of involved pleura, lung, or even the pericardium can be similarly biopsied if indicated. The procedure at most takes less than an hour to do, and in many cases the data supplied by this biopsy enables the patient to avoid prolonged and costly hospitalization.

PYOGENIC LIVER ABSCESS

DESPITE THE ENIGMA that pyogenic liver abscess presents, diagnosis can be established if one considers its presence. However, the ill-defined nature of the patient's complaints and the failure of localizing signs appearing early in the disease tend to make



editorials

diagnosis extremely difficult. In addition, it is noted that in the solitary pyogenic abscess (the most susceptible to remedial surgery) the etiology is frequently unknown or of very doubtful origin.

The surgical literature contains many articles describing the success of staged drainage procedures in treatment. Recent experience, however, demonstrates that very successful one stage drainage operations may reduce morbidity and length of hospitalization. One such operative endeavour resulted in dramatic improvement of a patient with multiple liver abscesses where the abscesses were confined to a discrete area in the liver.

Criticism of one stage procedures in treatment of pyogenic liver abscess results because of transgression of 'virgin' peritoneal surfaces. However, one must consider the fundamental surgical principle that incision and drainage of an abscess cavity is the treatment of choice for any abscess, even with present day adjunctive antibiotic therapy.

Though not a common problem, pyogenic liver abscess does occur frequently enough to be of concern to physician and patient. Morbidity may be perplexing, and mortality is high. In the absence of surgical intervention, the mortality is 100 per cent in management of solitary pyogenic liver abscesses. Complications of liver abscess are profound in themselves. More commonly one may anticipate pyemia with resultant abscess in other organs, or subphrenic abscesses, pneumonia, empyema, etc. Ultimate catastrophes have occurred, also, such as peritonitis due to rupture and direct rupture into pericardium, thoracic duct, vena cava, or hepatic vein.

Solitary pyogenic abscess of the liver is most commonly seen in young and middle age adults. Where proper and adequate bacteriologic studies have been performed it has been noted that in 50 per cent or more of the cases, the pus is sterile. The fact that mortality has changed little in the past 50 years should make one strive toward a better

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EDITORIALS / Continued

solution of this problem from the standpoint of management and therapeutic endeavor. The onset is insidious, and frequently the source is obscure or impossible to determine, especially in the absence of pre-existing intraabdominal infection. Non-penetrating injuries to the abdomen have been known to cause an abscess due to hematoma formation associated with dissolution of damaged liver tissue and subsequent infection.

Fever, chills, pain, and profuse sweating are the most constant factors. Constitutional symptoms of abscess, such as malaise, anorexia, loss of weight and weakness are present. Nausea and vomiting may also exist but only rarely. The pattern of fever varies in that it may be continuous or intermittent, but usually a daily spike type elevation is noted, and often a chill occurs. Pain occurs in the area overlying the abscess and therefore most frequently in the right upper quadrant (90 per cent). Tenderness over the liver area and hepatic enlargement (75 per cent) are also significant observations, as is pain in the right shoulder. Jaundice occurs in a very few patients, but ascites is rare. Only rarely is the spleen enlarged.

Leucocytosis of 15-30,000, with an increase in polys, and a shift to the left in the differential count occurs and is far greater in the patient with a pyogenic abscess as compared to one with an amoebic abscess. Radiologic studies demonstrate an elevated right diaphragm with diminished movement or immobility and an enlarged liver shadow.

Conversely, in multiple liver abscess the symptoms are much more severe, fever is higher, and spiking elevation more frequent. Jaundice, too, is seen more commonly. The liver is usually larger, and tenderness is more pronounced. There is frequently a history of preceding infection in the intestinal tract.

The differential diagnosis between solitary and multiple pyogenic abscess is of paramount importance. The former responds dramatically to surgical drainage with adjunctive antibiotic therapy; the latter of course is usually best treated by massive doses of appropriate antibiotics.

C. W. LONG MUSEUM CONTRIBUTORS

SOME MONTHS AGO a request went out to each county medical society that if possible they send a contribution towards the support of the Crawford W. Long Memorial Museum. The following county medical societies were quite generous in their reply:

Fulton County Medical Society
% T. J. Anderson, M.D., Treasurer

875 West Peachtree St., N.E.
Atlanta, Georgia

Medical Society of DeKalb County
% H. G. Carter, M.D., Sec.-Treas.
DeKalb Health Center
Decatur, Georgia

Crawford W. Long Medical Society
% Bolling S. DuBose, Jr., M.D., Secretary
Athens, Georgia

Peach Belt Medical Society
% Frank Vinson, M.D., Secretary
Peach County Hospital
Fort Valley, Georgia

Hall County Medical Society
% Hamil Murray, M.D., Secretary
Hall County Hospital
Gainesville, Georgia

Walker-Catoosa-Dade County Medical Society
% E. M. Townsend, M.D., Secretary
Ringgold, Georgia

Elbert County Medical Society
% A. S. Johnson, Jr., M.D., Secretary
Elberton, Georgia

South Georgia Medical Society
% L. L. Burns, M.D., Secretary
Valdosta, Georgia

Muscogee County Medical Society
% Robert H. Vaughn, M.D., Secretary
Columbus, Georgia

Ware County Medical Society
% Arthur M. Knight, Jr., M.D.
Waycross, Georgia

Wayne County Medical Society
% Daniel Glover, M.D., Secretary
Jesup, Georgia

Bibb County Medical Society
% E. C. McMillan, M.D., Secretary
Macon, Georgia

Jackson-Barrow Medical Society
% A. A. Rogers, Jr., M.D., Secretary
Commerce, Georgia

Grady County Medical Society
% C. K. Singleton, M.D., Secretary
Cairo, Georgia

Cobb County Medical Society
% Fred K. Schmidt, M.D., Secretary
Marietta, Georgia

It is hoped that the remaining county medical societies who have not done so will send a suitable

contribution towards this cause making the check payable to the Crawford W. Long Memorial Museum Association, and mailing them to the Chairman of the Crawford W. Long Memorial Committee.

It is interesting to note that since its dedication the museum has had 5,000 visitors. These individuals have come from 41 different states and from 15 foreign countries. Thus the museum is achieving the world wide fame for which we had all hoped. Plans are now in progress to enlarge this small beginning

into a full scale museum, the first of it's kind in the history of the world. Your continuing support is urged, and you are missing something if you don't go by to visit this shrine at your first and earliest opportunity.

May we again thank those of you responsible for contributions towards it's maintenance.

The Committee for Crawford W. Long Memorial Museum

Medical College of Georgia
Medical Association of Georgia

ART OF THE PRACTICE OF MEDICINE

COURSE SCHEDULE

Small Auditorium
Education Building
Talmadge Memorial Hospital
Medical College of Georgia

- March 8—12:00 noon . . . "MEDICAL ORGANIZATION"**
 J. W. Chambers, M.D., LaGrange—Internist; Chief of Medical Service, City-County Hospital, La-Grange; Senior Physician, Clarke-Holder Clinic, LaGrange.
- March 22—12:00 noon . . . "HOSPITAL RELATIONS"**
 David Henry Poer, M.D., Atlanta—General Surgeon; Assoc. in Surgery, Emory University School of Medicine; Assoc. Chief of Surgical Service, Piedmont Hospital, Atlanta.
- April 5—12:00 noon "PHYSICIAN AND HIS FAMILY"**
 Paul Reith, M.D., Atlanta and Warm Springs—Orthopedic Surgeon; Asst. Professor of Anatomy and Lecturer in Surgical Anatomy, Emory University School of Medicine; Director of Surgery, Warm Springs Foundation, Warm Springs; Active Staff Emory University Hospital and Georgia Baptist Hospital, Atlanta.
- April 19—12:00 noon . . . "M.D.'s PERSONAL ECONOMICS"**
 Mr. Virlyn B. Moore, Jr., Atlanta—Vice President and Trust Officer, Fulton National Bank of Atlanta; President Woodrow Wilson Law School, Atlanta; Estate and Planning Officer and Investment and Insurance Councilor.
- May 3—12:00 noon "CONTINUING MEDICAL EDUCATION"**
 Arthur M. Knight, Jr., M.D., Waycross—Internist and Cardiologist; Chief of Medicine, Memorial Hospital, Waycross; Chief of Ware County Heart Clinic; Consulting Physician Atlantic Coast Line Hospital, Appling General Hospital, Pierce County Hospital, Douglas Coffee County Hospital.
- May 17—12:00 noon "ETHICS"**
 Hal M. Davison, M.D., Atlanta—Internist and Allergist; Past-President, Medical Association of Georgia; Formerly Chief of Medicine, Georgia Baptist Hospital, Atlanta.
- May 30—4:00 p.m. "RELIGIOUS ASPECTS OF MEDICAL PRACTICE"**
 The Rev. Charles V. Gerkin, Atlanta; Chaplain-Supervisor, Grady Memorial Hospital.
 The Rev. R. Donald Kiernan, Cedartown; Pastor, St. Bernadette Church, Cedartown.
 Mr. Sidney Parks, Atlanta; Attorney. Senior Faculty Member, Ahavath Achim, Religious School.

—5:00 p.m. "SENIOR DAY" SOCIAL HOUR AND BUFFET SUPPER

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It's Annual Session Time Again...

APPLICATION FOR HOTEL ACCOMMODATIONS Medical Association of Georgia 1958 Annual Session April 27, 28, 29 and 30, 1958, Macon

A Housing Bureau has been established for your convenience in making your hotel reservations in Macon for the 1958 ANNUAL SESSION of the Medical Association of Georgia. Comparable room rates are listed. Use the *Reservation Blank below*. Please specify your first, second and third choice hotel. All requests for reservations should give: (1) anticipated date and hour of arrival; (2) date and approximate hour of departure; and (3) names and addresses of all persons who will occupy the accommodations. ALL RESERVATIONS MUST BE CLEARED THROUGH THE HOUSING BUREAU. Since all requests for rooms will be handled in *chronological* order, you should mail your application as early as possible. All reservations will be confirmed.

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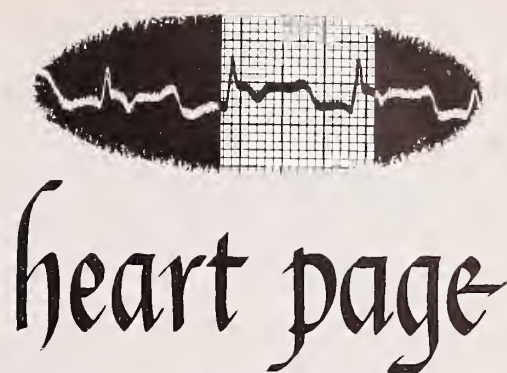
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DIET AND CONGESTIVE HEART FAILURE

L. HARVEY HAMFF, M.D., *Atlanta, Ga.*



Congestive heart failure is due to a decrease in cardiac output resulting in the inability of the kidney to excrete adequate amounts of sodium and water. This inability is not only related to decrease in renal blood flow but also to changes in blood flow to the adrenal and posterior pituitary glands. This results in an increase in aldosterone secretion, causing sodium retention. There is also an increase in the antidiuretic hormone of the neurohypophysis resulting in water retention. The treatment of this state, regardless of the underlying cardiac condition, consists of rest, digitalization, diuretic agents, and diet.

The dietary needs and restrictions play an important role in the proper management of congestive heart failure. The most important of these is related to sodium ion restriction. Restriction of sodium tends to decrease edema whereas excessive sodium intake can precipitate failure in the cardiac patient. The restriction of sodium will allow the patient to have a normal fluid intake of about 2500 c.c. daily, preventing the patient from becoming uncomfortable from fluid restriction.

The degree of sodium restriction varies with the severity of heart failure. Where it is mild, the simple removal of the salt shaker from the table and the preparation of food without added salt will prevent the formation of edema. In the more severe forms of failure, restriction of the sodium to 200 mg. daily is necessary to eliminate the pulmonary congestion and edema present. Markedly restricted sodium diets are not very palatable. This is one reason for increasing the sodium content of the diet as soon as the patient can adequately handle it. The freedom from dyspnea and the absence of sudden weight gain, which would denote fluid retention, are simple guides showing that excess sodium is not being ingested and retained.

The low salt syndrome is an occasional complication of therapy for congestive failure. It has only

been described in the last seven years and is characterized by lethargy, weakness, anorexia, nausea, vomiting, an increase in water retention, oliguria, azotemia, hyponatremia, and hypochloremia. It was thought that this state was due to excessive loss of sodium and chloride through the kidneys at a time of marked sodium restriction. Treatment consisted of the intravenous infusion of five per cent hypertonic saline with extremely poor results. The treatment of this condition was discussed in a previous communication by Dr. Arthur J. Merrill.

Accurate dietetic instructions are necessary if the program of sodium restriction is to be successful. This must be done either by a dietitian or a physician. In some communities where the drinking water has a high sodium content, the patient should drink distilled water. One must also remember that other sodium salts, such as sodium bicarbonate and sal-hepatica must also be restricted. The Georgia Heart Association has an excellent manual available called *Food for Your Heart*. This has been prepared at Harvard University for the American Heart Association. From this manual the physician can easily instruct the patient on a proper diet. It is available without charge for the doctor or patient if the physician will write to the Georgia Heart Association requesting that it be sent.

The control of obesity is of course obvious. With physical activity, obesity increases the work load of the heart because more work must be done when body weight increases. The diaphragms are displaced upward with a decrease in vital capacity. These factors can precipitate and increase the severity of congestive heart failure. A caloric restriction to 1200 calories daily will produce weight loss at a desirable rate. This should be continued until the ideal weight has been achieved.

We have so far discussed the dietary restrictions that are of benefit in the treatment of congestive failure. It should be mentioned that dietary deficiencies at times can be the cause of congestive heart

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

HEART PAGE / continued

failure. The most notable example is the case of beriberi heart disease produced by a thiamin deficient state. Another example would be the case of serious anemic heart disease as the result of pernicious anemia, which is the result of cobalamine (Vi-

tamin B-12) deficiency.

Finally it is important to mention that the long term dietary treatment will consist of a proper nutritional state. This will require an adequate intake of calories, proteins, vitamins, and a minimum of salt.

478 Peachtree Street, N.E.

MEDICAL LEGISLATION

THOSE WHO ARE TRYING to follow the course of medical legislation find an unusual situation developing in this session of Congress. All of Washington is being subjected to forces, some completely new, that often work at cross-purposes to each other. The result could be a moratorium on health legislation, or again it could be a flood of new laws.

At the start of the session, a new-born interest in science completely dominated the scene—by a frantic spending of billions of dollars we would overtake Russia. That was the theme in Washington, and it persisted despite a few quiet voices that asked whether Russia really had far outdistanced the U. S. or was merely exploiting a slight advantage.

Even before the American satellite started on its orbit some of the panic had subsided, and most of the legislators had decided that advent of the space age had not removed all of the old problems and opportunities in legislation and politics. The familiar issues were still there, medical panaceas included.

The stock of Russian achievements will, at any rate, produce legislation designed to short up our educational system. This seems to be generally accepted. For the medical profession, two provisions are of major interest. Scholarships would be either four or six years—offering some assistance to premed students and in some cases to those in their first year of medical school. Also, fellowships would be available for medical and other graduates if they wanted to teach or go into research.

The administration's idea was a program that would cost a billion dollars; several leading Democrats joined in a bill proposing three billion dollars as a stimulant to mathematics and science.

But there are other factors to be reckoned with. For the first time a President set down in black and white in his budget just how he proposed to withdraw the federal government from some activities, or limit its participation, and turn the programs back to the states. Mr. Eisenhower wants to slow down on the Hill-Burton hospital construction program and change its emphasis, he wants to mesh in some veterans' benefits with social security payments, he would have the states do more and the U. S. less in public assistance (where medical payments are a growing factor), and he hopes to get Congress to drop the \$50 million a year program of grants to help build water treatment plants.

Whether Congress will follow the President's lead in the back-to-the-states movement is another question. At least he has said specifically what he thinks should be done, and when.

The Defense Department and science will get the

major attention and the major money, but some may spill over into medicine.

There is some interest in a tight domestic budget and returning certain activities to the states, but old fashioned politics combined with a fear of a continuing recession may again open up the federal purse.

Medical legislation, always a popular subject, may get more and more attention as the session rolls on. If so, the Forand bill among others would come immediately to the fore.

Notes

Several developments in the legislative field on Jenkins-Keogh bills came early in the session. The American Thrift Assembly, representing some 10 million self-employed, urged favorable House Ways and Means action, and the American Medical Association pointed out that the proposal for tax deferment of money paid into retirement plans could help solve the problem of maldistribution of physicians.

In the Senate, a majority of the Small Business Committee introduced a tax relief bill with a J-K provision. The section would allow anyone not now benefiting from a qualified pension plan to set aside 10 per cent of annual income (\$1,000, maximum). The bill went to Senate Finance Committee.

A limited number of medical scientists from this country and Russia will give lectures in each other's countries this year in an exchange program worked out by the State Department and the Soviet government. Also planned are exchanges of medical journals between medical libraries and of medical films. All these are part of a broad scientific, cultural and education program between the two nations. Details haven't been worked out.

After six months' operation of the disability payments program under social security, benefits were going to more than 131,000 and totaled \$10 million a month. Within the next 12 months the rolls are expected to increase to about 200,000, at an annual cost of about \$175 million.

Influential Rep. John Fogarty (D., R.I.) wants the House to ask President Eisenhower to call a White House conference on aging, at which medical and all other problems of the older population would be taken up. Mr. Fogarty also would attempt to interest states in similar conferences, to be conducted prior to the Washington meeting.

From the Washington Office, American Medical Association.

BOOKS RECEIVED

Beckman Harry, M.D., **DRUGS, THEIR NATURE, ACTION AND USE**, W. B. Saunders Company, Philadelphia 1958, 684 pp.

Andresen, Albert F. R., M.D., **OFFICE GASTROENTEROLOGY**, W. B. Saunders Company, Philadelphia 1958, 639 pp.

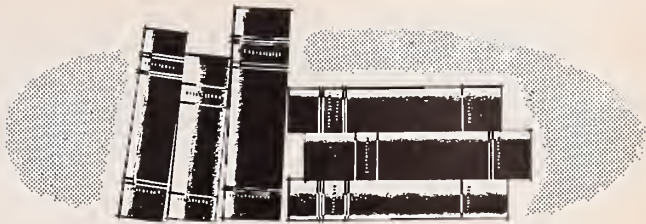
Levine, Samuel A., M.D., **CLINICAL HEART DISEASE**, W. B. Saunders Company, Philadelphia 1958, 636 pp.

Wechsler, Israel S., M.D., **A TEXTBOOK OF CLINICAL NEUROLOGY**, W. B. Saunders Company, Philadelphia 1958, 735 pp.

Novak, Emil, M. D. and Edmund R. Novak, M.D., **GYNECOLOGIC AND OBSTETRIC PATHOLOGY WITH CLINICAL AND ENDOCRINE RELATIONS**, W. B. Saunders Company, Philadelphia 1958, 628 pp.

Wilson, Charles C. (Editor), **HEALTHFUL SCHOOL LIVING**, National Educational Association and American Medical Association, 1957, 307 pp. \$.00.

HOSPITAL ACCREDITATION REFERENCES, American Hospital Association, Chicago, 1957, 132 pp., \$3.25.



physician's bookshelf

REVIEWS

Forkner, Claude E., M.D., **PRACTITIONERS CONFERENCES Held at The New York Hospital—Cornell Medical Center**, Appleton-Century-Crofts, Inc., New York, 1957, 315 pp. \$6.75.

This excellent book discusses 15 different subjects. They are:

1. Should Patients Be Told the Truth About Serious Illness?
2. Trichinosis
3. Cancer of the Thyroid
4. Cancer of the Prostate
5. Cancer of the Esophagus
6. Tumors of the Lung
7. Portal Hypertension
8. Tumors of the Bone other than Multiple Myeloma
9. Early Detection of Heart Disease
10. Dermatophytosis, Tinea Capitis, and Monilia Infections of the Skin
11. Poison Ivy and Contact Dermatitis
12. Encephalitis and Parkinsonism
13. Endometriosis
14. Consultations with Anesthesiologists
15. Gout

The book is a resume of a round table symposium with several different men giving their views on the conference subject. It is interesting to read as well as a good reference book.

This copy also has the index for volumes I to VI.

This is a book that would be of definite value to both the general practitioner and the specialist.

T. A. Sappington, M.D.

ORGANIZED HOME MEDICAL CARE IN NEW YORK CITY, A STUDY OF NINETEEN PROGRAMS, by the Hospital Council of Greater New York, The Commonwealth Fund, Harvard University Press, Cambridge, Mass., 1956, 539 pp., \$8.00.

This volume reports a study undertaken by the Hospital Council of Greater New York covering 19 home medical care programs in New York City financed in part

by a grant from the New York Foundation to the Hospital Council of Greater New York.

The objectives were to describe and evaluate existing facilities for home care in New York City. "Those programs in New York City which provide patients with medical, nursing and social services in their home and which coordinate the operation of these services under a centralized administration" were the only programs studied.

Of the 19 programs surveyed, 16 were operated by New York City Department of Hospitals. Two programs were operated by voluntary hospitals, one of which, Cornell, uses the service primarily for educational purposes. The other program was operated by the city Department of Welfare.

The study actually surveyed programs caring for an average of approximately 5,000 patients.

The method of study was through interviewing a random sample of the patients (and their families). After these interviews, the results were coded and transferred to punch cards and tabulated by machine methods. The findings of the study should be interesting to any physician, indeed to any person interested in community health. The sample showed that the patients on the home care program were primarily elderly people with more than half of the patients being over 65 years of age and only four per cent under 25 years of age. It was also interesting to note that the median income of the families studied was about one half of the median family income of the general population and, that of those persons who had been wage earners, three-fourths had been forced to retire by the illness for which they were currently receiving treatment. The study disclosed that more than three-fourths of all the patients on the programs were there by reason of five types of illness. As would be expected, arteriosclerotic and hypertensive heart disease accounted for more than one-third of all the patients. Diabetes accounted for 18 per cent, while central nervous system disorders accounted for an equal number. Malignant diseases and arthritis each accounted for nine per cent of the patients.

Ninety per cent of all the patients interviewed were long term cases and had been on the program for more than one year at the time they were interviewed. In the majority of the programs, the patient care was under the administrative direction of a capable physician. However, in six of the 16 municipal programs and in the Welfare Department Program it appears that the demands for services were so great that adequate super-

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

vision of the services needed and given was impossible to attain. The case load per physician was below fifty in the two voluntary hospital programs and was above 100 in half of the municipal programs. Patients were seen by residents from the hospitals, medical students from Cornell, and by private physicians who were serving on a part time basis. One-half to two-thirds of the patients reported change in their physicians during their current episode of home care.

The assignment of social workers, nursing coordinators, and physical and occupational therapists was based entirely upon the amount of personnel available which was certainly not adequate in any of these services.

In spite of the fact that there were some deficiencies in services rendered, it was noted that 90 per cent of all the patients expressed a preference for home care. Forty per cent of the patients were completely adjusted and satisfied and only 25 per cent were definitely dissatisfied with the care which they were receiving. The other 35 per cent apparently had mixed emotions.

The findings and the recommendations suggested to the investigators that the program should be definitely expanded. They urged the extension of these programs to other voluntary hospitals and the only real criticism which I can find with their recommendations is the fact that there was apparently no thought or consideration given to the part which the Department of Public

Health should play in the planning and execution of medical care programs for the indigent.

This study points up the need for each community to develop its own study of the needs and the methods for rendering medical care to the indigent and semi-indigent. It would appear that Public Health Departments now have a golden opportunity in community education and community planning to work with physicians and hospitals for the development of community wide comprehensive hospital and public health services. Until Health Departments assume this task the provision of medical care will not be adequate in any community.

Rufus F. Payne, M.D.

Christopher, Frederick, M.D., ONE SURGEON'S PRACTICE, W. B. Saunders Company, Philadelphia, 1957, 151 pp., \$4.00.

This book gives a very down to earth approach to the practice of medicine. It is one man's philosophy of a medical life backed by many years of valuable experience in the general surgical field. It is fairly well written, with a scientist's manner of expressing even human interest stories.

The author closely follows chronologically the steps a young man or woman must take in setting forth into this varied field of medicine. He discusses the pros and cons which a pre-medical student must consider and also attempts to help an intern find his or her way into the appropriate branch.

He touches on several subjects which are often overlooked in residency training, such as the importance of doctor-patient relationship, frequently lost in big city hospitals. There are helpful hints on medical jurisprudence and medical fees.

The book is easy reading and would make a pleasant gift for a friend.

Charles H. Watt, Jr., M.D.

Medical Association Dues-1958

PLEASE REMIT ON THIS FORM TO YOUR COUNTY SOCIETY SECRETARY

Name: _____

Address: _____

County Society: _____

1958 A.M.A. Dues _____ \$25.00

1958 M.A.G. Dues _____ \$40.00

1958 County Society Dues _____ \$

Total _____ \$

Make Check Payable to your County Society Secretary and remit directly to him immediately if you have not already done so.

Holl, W. J.; N. Nathanson; and A. D. Langmuir, Communicable Disease Center, Public Health Service, Atlanta, Georgia, "The Age Distribution of Poliomyelitis in the U. S. in 1955," *Am. J. Hygiene* 66:214-234 (Sept.) 1957.

The literature on the age distribution of poliomyelitis and the factors affecting it is reviewed. Data collected in 1955 on more than 19,000 cases from 34 states and three territories are presented and analyzed with reference to these factors and to the effect of the limited poliomyelitis vaccination programs. The major findings were: (1) Rates for paralytic poliomyelitis in 1955 reached a maximum at ages two through five years, and for nonparalytic poliomyelitis at ages four through six years, with a secondary peak between ages 20 and 30. Regional differences in these patterns were observed. Among children, cases in males outnumbered those in females with a reversal in young adults. (2) For paralytic poliomyelitis, there was a marked trough at ages seven and eight in the 1955 age distribution, reflecting the concentration of poliomyelitis vaccinations in this narrow age span. These reductions in age-specific rates, compared with relative rates in 1952, were compatible with estimates of effectiveness of poliomyelitis vaccine published elsewhere.

Greenblatt, Robert B., M.D.; Jorge M. Mantout, M.D.; A. Marvin Zimmerman, M.D., and William T. Lucas, M.D., Medical College of Georgia, Augusta, Ga., "Cushing's Syndrome in Infancy" *Arch. Disease of Children* (Dec) 1957.

A case of Cushing's syndrome in a five month old female is reported. Cushing's syndrome in a prepuberal individual is rare and in infancy, almost unique.

The lesion in the case presented was a benign adrenal cortical adenoma. Of the 31 instances on record of Cushing's syndrome in children resulting from an adrenal tumor, malignancy was present in 28, benign adenoma in three.

Aside from the clinical appearance of marked obesity, moon face, enlarged clitoris, and pubic hair, the diagnosis was facilitated by the elevated 17-ketosteroids (6.5 mg./24 hours) and 17-hydroxycorticoids (9.3 mg./25 hours), and the persistent absence of circulating eosinophils in the fasting blood.

The successful pre- and post operative management of this infant is described.

Bryant, Milton F., and John M. Howard, Emory University Hospital, Emory University, Georgia, "Necrotizing Properties of Metaraminol (Aromine) and Arterenol (Norepinephrine)," *Arch. Surg.* 75:1020-1022 (Dec) 1957.

Two vasopressors currently used in the treatment of various acute hypotensive states are metaraminol (aramine; L-1-(m-hydroxy-phenyl)-2-amino-1-propanol) and levarterenol (levophen; L-norepinephrine). The cardiovascular and renal hemodynamics of these two drugs have been extensively studied by many investigators, both clinically and

in experimental animals. Their local effects on the soft tissues, when administered intravenously or subcutaneously, have received inadequate attention, although in many patients the local necrotizing properties of various vasoconstrictors have been distressingly obvious.

Metaraminol (aramine) and arterenol (norepinephrine) are potent vasoconstrictors which are frequently used in the treatment of neurogenic hypotension. Soft-tissue sloughs resulting from the intravenous administration of solutions containing levarterenol are apparently due to, and can be experimentally produced by, the slow extravascular infiltration of the solution.

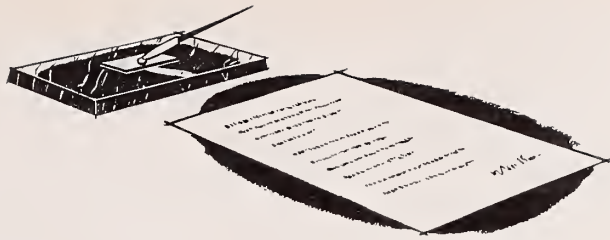
Within the limits of this study, soft-tissue necrosis could not be produced by infusing metaraminol intravenously or into the subcutaneous tissues. Metaraminol can apparently be given by intravenous drip infusion without the danger that inadvertent extravasation will lead to extensive soft-tissue sloughs.

Equen, Murdock, George Roach, Robert Brown, and Truett Bennett, 144 Ponce de Leon Ave., N.E., Atlanta, Georgia, "Magnetic Removal of Foreign Bodies from the Esophagus, Stomach, and Duodenum," *Arch. Otolaryng* 66:698-706 (Dec) 1957.

This paper was presented before the Sixth International Congress of Otolaryngology held in Washington in May, 1957. It includes much of the material (except for foreign bodies in the tracheobronchial tree) which was published in Dr. Equen's well received monograph.

There are 16 excellent plates. Thirteen of these were used in the book, and one even earlier, but it would be hard to find x-rays that would better illustrate the points made.

With the magnet, 14 open safety pins and 14 other objects had been removed from the esophagus; in 189 cases foreign bodies had been retrieved from the stomach (as many as four bobby pins from one stomach), and 19 from the duodenum. In two additional cases, perforation of the duodenum by a bobby pin or a nail required open operations. In the complete series of 238 cases there was no mortality.



abstracts by georgia authors

The authors admit that the large majority of magnetic foreign bodies that clear the cricopharyngeal constriction will also eventually clear the external anal sphincter. Since, however, it is impossible to recognize those that will, they advocate, especially when the foreign body has sharp points or cutting edges, that it be removed promptly with a magnet through the normal channels, thus preventing exploratory laparotomy.

Greenblatt, Robert B., M.D., Medical College of Georgia, Augusta, Georgia, "The Adenohypophysis and Ovulation" *Fertility and Sterility* 8:537-546 (Nov-Dec) 1957.

Though much has been learned about ovulation, and many technics are employed to help induce ovulation, our knowledge of the mechanism of this most important function remains meager. Under conditions of abnormality, the prolonged or suitably timed administration of ovarian and other hormones may lead to restoration of a hormonal balance compatible with ovulation.

The following technics are available in an effort to induce ovulation: (1) stimulating doses of irradiation of the ovaries, (2) wedge resection of the ovaries in patients with the Stein-Leventhal syndrome, (3) the cyclic use of estrogens and/or progestogens, (4) cortisone in patients with hirsutism and high urinary 17-ketosteroids, and (5) thyroid medication in those with some evidence of hypothyroidism.

It may be said that employment of anterior pituitary hormones such as pregnant mare's serum or chorionic gonadotrophin has proved most disappointing either when used alone or in sequence.

Thompson, Jock A.; John R. Derrick; and John M. Howard, Emory University School of Medicine, Emory University, Georgia, "Relapsing Pancreatitis in Alcoholic and Non-alcoholic Potents" *Surgery* 42:841-848 (Nov) 1957.

Observations of this series of 89 indigent patients disclose that, after an initial attack of acute pancreatitis, recurrent attacks of pancreatitis occurred in seventy-two per cent of the alcoholic

ABSTRACTS / Continued

patients while only thirty per cent of the non-alcoholic group had recurrent episodes of pancreatitis. The mortality of the initially recognized attack was similar in both groups, but as the mortality of recurrent attacks is considerable, it is probable that the alcoholic patients will ultimately have a considerably increased mortality. The incidence of pseudocyst and pancreatic calcification was considerably increased in the alcoholic group.

The patients with gallstones tended to have fewer recurrences as they were usually relieved by the removal of biliary stones. The rate of relapse prior to correction of the biliary disease was considerable, but not as marked as in the group of alcoholic patients. Removal of a normal gall bladder did not alter the rate of recurrence.

Pancreatitis is a recurrent disease in the majority of indigent patients with the alcoholic patient having an extremely poor prognosis.

Haden, Halcott T., 46 5th St., N.E., Atlanta, Ga., "Vitamin K Deficiency Associated with Prolonged Antibiotic Administration," Arch. Int. Med. 100:986-988 (Dec) 1957.

A case is presented in which vitamin K deficiency developed in a 46 year old woman who took various antibiotics orally for a long period. This resulted in a severe hemorrhagic diathesis. Vitamin K deficiency cannot be produced by dietary deficiency alone. In this case the intestinal bacteria were apparently so decreased or altered by the antibiotics that vitamin K production in the intestinal tract failed. This, associated with a deficient diet, resulted in a vitamin K deficiency which responded promptly to vitamin K administration.

Holladay, W. E., Jr., and A. C. Witham, Medical College of Georgia, Augusta, Georgia, "The Tetralogy of Fallot," Arch. Int. Med. 100:400-414 (Sept.) 1957.

Review of 32 cases of tetralogy of Fallot reveals a wide range of clinical manifestations. The many factors which influence the extreme variability of intensity and age of onset of cyanosis are discussed. Relative frequency of acyanotic tetralogy is emphasized. Accentuated "a" waves were occasionally recorded. A syndrome of hypertension, left ventricular hypertrophy, congestive failure, and pronounced cardiomegaly was seen in six children. The majority of these had infundibular stenosis and a very poor prognosis. Transient hypertension may occur post-operatively. Murmurs may arise from either the obstructed pulmonary artery, the septal defect, or both. Infundibular stenosis usually has a decrescendo systolic murmur, and valvular stenosis, a late crescendo systolic murmur. Absence of murmurs suggests pulmonary atresia. Continuous murmurs may arise from dilated bronchial arteries and parasternal diastolic murmurs of uncertain genesis are occasionally found. Increased

cardiac transverse diameter does not necessarily indicate additional anomolies, but may reflect hypertension or severe infundibular stenosis. The "coeur en sabot" represents a minority of cardiac silhouettes, usually occurring only in early childhood. Identifiable and even prominent main pulmonary arteries are sometimes seen and suggest valvular stenosis. Pulmonary blood flow may be low, normal, or increased. Right ventricular hypertrophy may be so concentric as to be undetectable at fluoroscopy but is usually indicated by the cardiogram or physical examination. The direction and the magnitude of the transeptal shunt is controlled by the relative resistance to pulmonary and aortic blood flow. Factors influencing these variables and the role of medical management are discussed.

Howard, John M., Emory University, Georgia, and John R. Derrick, Galveston, Texas, "Emphysema of One Lung Associated with Atresia of the Contralateral Pulmonary Artery," Am. J. Surgery, 94:784-786 (Nov) 1957.

The absence of one pulmonary artery in patients in whom the mediastinum in the midline presents no major diagnostic problem. The striking difference in the vascular markings on the two sides in a routine roentgenogram of the chest suggests the diagnosis. A case is presented in which the absence of the right pulmonary artery resulted in marked emphysema of the left lung. An initial diagnosis of congenital hypertrophic emphysema almost led to operative intervention which would have been fatal in this particular patient.

Marked emphysema of one lung associated with absence of the pulmonary artery to the opposite lung may erroneously direct attention toward the pulmonary changes; however, most of the cases may be diagnosed by a routine x-ray of the chest, but in questionable cases, particularly those in which there is unilateral emphysema, angiocardiology may be necessary. The anomaly appears to be associated with the tetralogy of Fallot more often than any other isolated cardiac defect.

As yet no one has demonstrated an effective operation for the treatment of this anomaly. It is possible that patients with this condition with difficulty resulting from a deficiency in the oxygenation of blood may be benefited by talc poudrage of the ischemic side.

Bryant, Milton F., M.D., James A. Kaufmann, M.D., Major F. Fowler, M.D., and Arthur R. Evans, M.D., Atlanta, Ga., "Acute Occlusions in the Renal Vascular Pedicle: A Case Report of Acute Thrombosis of the Renal Artery," South. Med. J. (Dec) 1957.

Acute thrombosis of the renal artery and acute thrombosis of the renal vein are relatively rare lesions. However, both of these vascular catastrophies are undoubtedly more common than is recorded in the literature. Many of the reported cases have not been diagnosed pre-operatively; in fact, it was not until

1942 that Campbell and Matthews made the first preoperative diagnosis of massive unilateral thrombosis of the renal vein which was subsequently cured by nephrectomy.

Acute thrombosis of the renal artery and acute thrombosis of the renal vein can be diagnosed early if these vascular catastrophies are kept in mind. Massive thrombosis of the renal vein most frequently occurs in the neo-natal period, usually associated with epidemic diarrhea, and if unilateral, is best treated by emergency nephrectomy. Acute thrombosis of the renal artery occurs in patients who have cardiovascular disease, and since one cannot differentiate between partial and complete renal infarction, conservative management is the treatment of choice. If one makes a diagnosis of an acute surgical, and no disease is found at celiotomy, the renal vascular pedicle should be palpated for evidence of thrombosis.

Thompson, Jack A., John M. Howard, and Keith D. J. Vowles, M.B., Emory University School of Medicine, Emory University, Georgia, "Acute Pancreatitis Following Cholechochotomy," Surg., Gynec., & Obst. 105: 706-710 (Dec) 1957.

Acute pancreatitis following biliary tract surgery is a catastrophic complication that is accompanied by a mortality rate in excess of 75 per cent. While there may be a simple reason for the onset of acute pancreatitis after biliary tract surgery, such an explanation is lacking at the present time. Despite the present limitations of knowledge of the etiology and pathogenesis of the disease, it is evident that certain clinical factors are associated with the occurrence of pancreatitis after biliary tract surgery.

Of 75 reported cases the type of operation performed is recorded in sixty-six. The one factor common to 62 of the 66 operative procedures performed is cholechochotomy and operative manipulation within the common bile duct. In the other four patients operation consisted of cholecystectomy and external palpation of the common bile duct to exclude the presence of stones. Seventeen cases of post-biliary tract surgery have followed insertion of a T-tube with the long arm through the ampulla. Conservative management of the attacks of pancreatitis lead to a 67 per cent mortality while reoperation was accompanied by an 83 per cent mortality.

As acute pancreatitis following biliary tract surgery appears to be a complication of cholechochotomy, it is mandatory, not only that the surgeon adopt rigid criteria for exploration of the common bile duct; but, when exploration is necessary and the sphincteric region is approached mechanically either with bougies, dilators, or the scalpel, the possibility of inducing pancreatitis should be appreciated, and the exploration carried out only with the greatest of care. A long arm T-tube through the sphincter probably should not be used.

ACCORDING TO THE latest Heart Association statistics, more than 16,000 deaths in Georgia were attributed to cardiovascular disease in 1956.

**EXECUTIVE COMMITTEE OF
COUNCIL, January 12, 1958**

THE JANUARY MEETING of the Executive Committee of Council was called to order Sunday, January 12, 1958 in the MAG offices, Academy of Medicine, Atlanta, by Chairman George Dillinger, Thomasville.

Present in addition to Dr. Dillinger were: W. Bruce Schaefer, Toccoa, President; Lee Howard, Sr., Savannah, President-Elect; Hal M. Davison, Atlanta, Immediate Past President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and J. G. McDaniel, Atlanta, Chairman Finance Committee. Also present were Messrs. M. D. Krueger, John F. Kiser, and John D. Arndt of the MAG Headquarters Office.

Mr. Krueger reviewed the minutes of Council for December 7-8, and on motion made and seconded, it was voted to accept these minutes as read.

Life Insurance Correspondence

Dr. Schaefer presented a letter from Dr. Lee Battle in regard to a question of fees under the Bankers Fidelity Life Insurance Company health and accident plan for school children. It was voted to accept this letter for information and to inform Dr. Battle that this answer to the company was sufficient.

AMA Legal Conference, May 9-10, 1958

Mr. Krueger presented an invitation from the AMA Law Department for representatives of the MAG to attend the second national Legal Conference for State Associations, Attorneys, and Executive Secretaries. It was voted to recommend approval to Council, and for Mr. Dunaway and one of the executive secretary's be sent to this meeting. It was suggested that Fulton County Medical Society might defray some of Mr. Dunaway's expenses as he also represents their society.

VA Fee Schedule

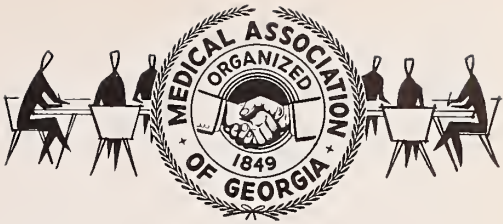
Mr. Krueger presented correspondence from the office of the Veterans Administration, Washington, D. C., in which MAG requested fee revisions of 14 items were discussed. In eight of these items the MAG fee requests were granted. In two of these items a partial revision was granted. In the four remaining items there was no change made by the Veterans Administration. It was voted to accept the ten items named earlier and to further petition the Veterans Administration to "split the difference" between the present fee schedule on these four items and the MAG requested revision.

Lung Cancer Study

Dr. McLoughlin read a letter from T. F. Sellers, Director of the State Health Department, in regard to a proposed study of the possible relationship of cancer of the lung to smoking and other environmental factors. This study to be conducted by the National Cancer Institute would involve questionnaires to physicians who signed death certificates for patients who died of lung cancer. After discussion, it was voted to endorse this study and executive Committee asks that a copy of the report made as a result of the study be forwarded to MAG when completed.

Award Authorization

Mr. Krueger asked for instructions in regard to the



the association

handling of the Hardman, GP of the Year, and Distinguished Service Award for 1958. It was voted to follow the procedure practiced in other years to send all three requests for nominations to county medical societies in one letter.

Legislative Committee Report

Mr. Kiser reported on recent meetings of the MAG Committee on Legislation.

Proposed mental health legislation was discussed, and Executive Committee voted complete support for the recommendations of the Joint House Senate Study Committee.

In regard to Traffic Safety Laws, the Executive Committee voted support to the provisions of the Legislative Study Committee and appointed the Public Service Committee to work with the Governor on traffic safety and to work with the Committee of the Fulton County Medical Society on such problems.

Talmadge Hospital Report

Dr. McLoughlin reported that an AMA Study Committee had been appointed and would probably visit the Medical College of Georgia and the Talmadge Memorial Hospital sometime in February.

American Medical Writers Association

Dr. McLoughlin presented a request from Dr. Woody that MAG pay dues for the Editor and Managing Editor of the Journal for membership in the American Medical Writers Association. This matter was approved.

Medicare

The members of the Executive Committee discussed the eleven state conference on Medicare held in Atlanta on January 11 and 12.

It was adopted that the Executive Committee go on record as approving the action of this Medicare Conference as follows:

"The representatives of state medical associations meeting in Atlanta, Georgia, January 11-12, 1958, to consider Medicare object to the Administrative regulations of the program.

"Specifically, they take exception to the imposition of a service-type program, because of their convictions that under P.L. 569 an indemnity type plan is permissible. Further, they express their sincere belief that an imposed service-type program interferes in principle and in practice with the doctor-patient relationship and contributes to

deterioration of good medical practice.

"They consider it imperative for these and other state associations jointly to petition the appropriate congressional committees and the secretary of Defense to permit negotiation of an indemnity program at the time of renewal of Medicare contracts.

"They therefore agree to request their associations to petition the appropriate congressional committees and the Secretary of Defense in this regard, in a concerted action, at the earliest moment permitted by approval of the associations concerned."

It was voted that on February 10 and 11 our Negotiating Committee be empowered to negotiate a new Medicare contract with the Government. The Committee strongly requests permission to negotiate an indemnity type plan.

It was voted to authorize Dr. Jones and his Review Board to make any changes in the fee schedule they deem necessary for the new contract.

It was voted that Mr. Shackelford be contacted and asked to attend the negotiation, if he deems it necessary, for a fee of \$500.00 or less plus expenses.

It was voted to appoint Charles S. Jones, Chris J. McLoughlin, Mr. John D. Arndt, and Mr. Shackelford, if necessary, as the negotiating team for the negotiation in Washington, February 10 and 11, 1958.

It was voted to appoint Charles S. Jones as Chairman of the State Review Board. Other members of the State Review Board to be M. F. Simons, Decatur, representing General Practice; L. C. Buchanan, Decatur, Surgery; Joseph Hilsman, Atlanta, Internal Medicine; J. Frank Walker, Atlanta, Pathology, Radiology, and Anesthesiology, and for Obstetrics and Gynecology, it was voted to request the Georgia State Ob-Gyn Society to nominate three members, one of whom will be appointed a member of the Review Board. It was also voted that the President of the Georgia Medical Association be asked to serve as an Ex-officio member of the Georgia Review Board.

It was voted to approve appointment to this Review Board of the following physicians representing six other cities in Georgia: (1) Savannah—Darnell Brawner; (2) Albany—Frank Thomas; (3) Columbus—Simone Brocato; (4) Macon—J.R. Shannon Mays; (5) Rome—Lee Battle; (6) Augusta—Charles M. Mulherin. Alternates were also appointed to this Committee in case these physicians would not be able to serve.

Dr. McLoughlin discussed certain administrative problems of Medicare, particularly involving the problem of fees for laboratory charges. It was voted to refer this matter to Dr. Jones and Dr. McLoughlin for adjudication.

New Business

It was voted to hold the next meeting of the Executive Committee at 9:30 a.m., Sunday, February 23 at the Hotel DeSoto, Savannah, Georgia.

There being no further business, the meeting was adjourned.

ANNOUNCEMENTS

Postgraduate Course in Edema, Its Pathogenesis and Management—March 13-15, 1958, University of Colorado Medical Center, Denver, Colorado. Conference devoted to the basic considerations and clinical applications of kidney function, edema, and diuresis. Designed to present in a comprehensive manner the problems of pathogenesis and management of edema as variously encountered in clinical medicine. Special emphasis placed on treatment. Ample discussion time. Registration, \$5.00; Tuition, \$20.00. AAGP Credit, 20 hours Category I. For full information write University of Colorado Medical Center, Office of Postgraduate Medical Education, 4200 East Ninth Ave., Denver 20, Colorado.

27th Annual National Venereal Disease Postgraduate Conference—April 23-24, 1958, University of Texas, M.D. Anderson Hospital and Tumor Institute, Texas Medical Center, Houston, Texas. Conference designed to acquaint the practitioner with the latest venereal diseases. Faculty for course will be drawn from major universities, Public Health Service personnel and other outstanding authorities in this field. AAGP credit, 20 hours Category I. No tuition fee. \$5.00 registration for those desiring Category I credit. Write Dr. Grant Taylor, University of Texas Postgraduate School of Medicine, Houston, Texas.

World Congress of Gastroenterology—May 25-31, 1958, Sheraton-Park Hotel, Washington, D.C. Over two hundred national and international scientists, physicians, surgeons, roentgenologists, and parasitologists will present the most recent clinical and investigative advances in gastroenterology at this first world congress to be held in the United States. For further information write H. Marvin Pollard, Secretary-General, World Congress of Gastroenterology, University Hospital, Ann Arbor, Michigan, U.S.A.

Postgraduate Courses—New York University-Bellevue Medical Center offers postgraduate courses during the month of March 1958 in the departments of anatomy, anesthesiology, medicine, neurosurgery, ophthalmology, orthopedics, otorhinolaryngology, pathology, pediatrics, physical medicine and rehabilitation. Contact Associate Dean, NYU Postgraduate Medical School, 550 First Avenue, New York 16, N.Y.

Third International Congress of Allergy—October 19-26, 1958, Paris, France. Sponsored by the International Association of Allergology and French Allergy Association. Program consists of symposia on emphysema, immunology, recent clinical advances, biochemical aspects, auto-immune reactions, dermatology, and socioeconomic aspects; sectional papers; luncheon conferences; pre or post convention tours and an enjoyable social program. For further detail write Dr. Samuel M. Feinberg, 303 East Chicago Ave., Chicago, Illinois.

American Congress of Physical Medicine and Rehabilitation—36th annual scientific and clinical session—August 24-29, 1958, Bellvue Stratford Hotel, Philadelphia. All sessions open to members of the medical profession in good standing with the American Medical Association. Full information may be obtained by writing Dorothea C. Augustin, American Congress of

Physical Medicine and Rehabilitation, 30 North Michigan Avenue, Chicago 2, Illinois.

Child Psychiatric Center—The Department of Psychiatry of the University of North Carolina School of Medicine announces the opening on February 1, 1958, of a nine bed Child Psychiatric Inpatient Service in the North Carolina Memorial Hospital for Intensive diagnostic evaluation and short term therapy of emotionally disturbed children under twelve years of age. Children may be referred as private or staff patients from North Carolina and as private patients from other states. Inquiries should be addressed to the Admissions Officer, Psychiatric Center, N. C. Memorial Hospital, Chapel Hill, N. C.

National Foundation for Infantile Paralysis Tissue Culture Course—Fellowships for study in formal courses designed to teach the principles, techniques, and application of tissue culture offered to postdoctoral investigators, teachers, graduate students, and experienced laboratory personnel. Funds awarded for period necessary to complete course, usually six weeks. For further information write Division of Professional Education, National Foundation for Infantile Paralysis, 301 East 42nd St., New York 17, N. Y.

American Congress of Physical Medicine and Rehabilitation Essay Award—To stimulate interest in the field of physical medicine and rehabilitation, the American Congress of Physical Medicine and Rehabilitation will award annually a prize for an essay on any subject relating to physical medicine and rehabilitation. Contest primarily for interns, residents, graduate students in pre-clinical sciences and in physical medicine and rehabilitation. Manuscripts limited to 3,000 words, can not have been previously published, and must be submitted by June 2, 1958. \$200 prize. For details write American Congress of Physical Medicine and Rehabilitation, 30 N. Michigan Ave., Chicago 2, Illinois.

DEATHS

THOMAS CLARENCE CLODFELTER, 72, Milledgeville, died at his home on December 22.

Dr. Clodfelter had been a member of the Milledgeville State Hospital staff for 21 years. He was a member of the Baldwin County Medical Society, a member of the Georgia Psychiatric Board, and a former steward of the First Methodist Church.

He is survived by his wife; one son, Major T. C. Clodfelter, Jr., U. S. Air Force; two daughters Mrs. M. L. Fisher, Carrollton, and Mrs. Philip Chandler, Milledgeville; one brother; and two sisters.

HOMER HEAD, 44, Monroe, died December 16, following a short illness.

Dr. Head completed his medical training at the Medical College of Georgia at Augusta and interned at the Erlanger Hospital in Chattanooga. He served in the Medical Corps of the Army during World War II.

Dr. Head came to Monroe in 1945. At the time of his death, he was president of the Walton County Medical Society, physician for Walton County, medical director of the local Civilian Defense project, and he served in the Friday Nurse-Midwife clinics of the

County Health Department.

He was a member of the Monroe First Methodist Church, the American Legion, and the Veterans of Foreign Wars.

Survivors include his wife, one son, Mike; three daughters, Jerry, Jenny, and Mary Jane; and one sister, Mrs. James A Green, Athens.

JOHN THOMAS NORVELL, JR., Augusta physician, died December 30 after a lengthy illness.

A graduate of the University of Georgia Medical College, Dr. Norvell served his internship at St. Johns Hospital, New York. He completed his study in special subjects in Europe.

He was a member of the Richmond County Medical Society, Theta Kappa Psi fraternity, WOW, Modern Woodmen of America and a member of the Central Christian Church where he served as Sunday school superintendent.

He is survived by his wife, the former Frances Best; two daughters, Joan and Julie Norvell; his mother; and one brother.

EDGAR DEWITT SHANKS, JR., Atlanta internist, died January 2, unexpectedly at the age of 37.

Born in Atlanta, Dr. Shanks attended Emory University and graduated from the Medical College of Georgia at Augusta. After serving with the U. S. Army Medical Corps, Far East Command in Japan, he began his practice in Atlanta in 1951.

He was a member of the Fulton County Medical Society, the Medical Association of Georgia, the American Medical Association, and the Alpha Omega medical honor society. He served on the staffs of Georgia Baptist, Crawford Long, and Piedmont hospitals, and St. Joseph's infirmary.

Dr. Shanks was a member of the Joseph C. Greenfield Lodge No. 400, F&AM; DeKalb Council; Atlanta Commandery No. 9, KT; and the Yaarab Temple of the Shrine.

Surviving are his wife, the former Catherine Bizzell Roberts; three sons, Steven, Richard, and Edgar D. Shanks III; one sister; and one brother.

L. H. SHELLHOUSE, 74, Willacoochee, died January 2, following an extended illness.

Born in Aiken, S. C., Dr. Shellhouse graduated from the University of South Carolina, and the University of Georgia School of Medicine. Following completion of his medical training, he came to Willacoochee where he practiced for 45 years prior to his retirement two years ago.

Dr. Shellhouse was past Worshipful Master of the Willacoochee Masonic Lodge, a past chairman of the Atkinson County Board of Health. He was a member of the Coffee County Medical Association and the Southern and the American Medical Associations. He was a member of the Willacoochee Baptist Church.

Surviving are his wife; one son, Leon H. Shellhouse; one daughter, Mrs. Harold F. Milton, Jacksonville, Fla.; two brothers, three sisters, and five grandchildren.

A Resolution: Georgia Medical Society

Dr. Jay McLean was born August 13, 1890 at San Francisco, California, the son of Dr. John Tinsley McLean and Ina Olive (Glassford) McLean. He came from a distinguished family medically, his father being

DEATHS / Continued

a doctor of medicine and his uncle, Robert Armistead McLean, M.D., being Professor of Surgery and Dean of the Medical School, University of California.

After graduation from the University of California undergraduate school Dr. Jay McLean also aspired to become a physician, and he entered John Hopkins University School of Medicine in the fall of 1914 and graduated in 1919. During his medical school years he also took time to obtain a Master of Arts degree in Medical Research from the University of Pennsylvania, 1917. While working as a student doing research in Dr. Howell's laboratory at John Hopkins Medical School, he discovered a substance which at that time was called antithrombin and is now named Heparin. The discovery of this extremely valuable natural anticoagulant was indeed a remarkable accomplishment so early in his career, and had he done nothing else after this he would still have left his mark, and his fame would have been established throughout the medical world; but he was not content to rest on his laurels and went on to contribute much more to the fields of didactic as well as clinical medicine.

To mention a few of his academic appointments, Dr. McLean was an Assistant in Surgery at John Hopkins University Medical School under Dr. William S. Halsted (1919-1920) and an Instructor in Surgery there (1920-1923). During this time he was given a leave of absence (1922-1923) to fill a National Research Council Fellowship in Surgery at the University of Liepzig.

He later was an Instructor in Surgery under Professor Allen O. Whipple at the College of Physicians and Surgeons, Columbia University (1924-1925); Lecturer in Surgery, the New York Polyclinic Medical School and Hospital, (1925-1928); Instructor in Cancer, Cornell University Medical College, Memorial Hospital for Cancer, New York (1934-1937) under Dr. James Ewing.

At the request of Dr. Ewing, he organized the first high voltage radiation therapy unit in an American veterinary school, the Tumor Clinic of the University of Pennsylvania School of Veterinary Medicine, where he was guest lecturer in Radiation Therapy (1938-1939).

From 1943 to 1947, Dr. McLean was Associate Professor of Research Surgery at Ohio State University Medical College. In 1947 he became Director of Cancer Control U. S. Government, Washington, D. C., where he remained until 1949 when he moved to Savannah to become Director of the Savannah Tumor Clinic. Here he gave willingly, energetically and inspiringly of his time and wisdom, not only to his patients but also to those who were associated with him in the work of the clinic. Those who knew him more closely appreciated him most and received the benefit of his advice, encouragement, and friendship.

Dr. McLean was a member of Sigma Chi college fraternity and Nu Sigma Nu medical fraternity. He was a communicant of the Episcopal Church and was married to Georgia Alphin of North Carolina, who bore him one son, Franklin J. McLean. Dr. McLean was also a member of the Georgia Society of the Sons of the Colonial Wars, The St. Andrew's Society, and the Sons of the American Revolution. He was a mem-

ber in good standing of the Georgia Medical Society, the Medical Association of Georgia, and the American Medical Association.

It is with deep sorrow and regret that we take note of the passing of such a noble personality and we extend our utmost sympathy to his widow, Mrs. Georgia McLean, and his son, Franklin J. McLean.

It is hereby moved that copies of this memorial be sent to his wife and son and that a copy be spread upon the minute book of the Georgia Medical Society.

A Resolution: Whitfield County Medical Society

WHEREAS, *Dr. Harlan L. Erwin* graduated from the University of Maryland School of Medicine in 1904 and came to Dalton to practice medicine shortly thereafter, and

WHEREAS, during all this time he has been active and faithful in the care of the people of Dalton, regardless of their financial and social status, and

WHEREAS, during this time he has earned the esteem of his fellow doctors and has been honored by the presidency of the Whitfield County Medical Society and Seventh District Medical Society, and

WHEREAS, the Lord called him to his rest on October 16, 1957,

THEREFORE, BE IT NOW RESOLVED that the Whitfield County Medical Society mourns the loss of its valuable member Harlan L. Erwin, M. D., and that a copy of this resolution be spread on the minutes of this group and be sent to the family of Dr. Erwin and to the Medical Association of Georgia.

SOCIETIES

The following officers of the BALDWIN COUNTY MEDICAL SOCIETY were named recently: J. J. Word, Milledgeville, president; E. Y. Walker, Milledgeville, vice-president; A. S. Sanchez, Eatonton, secretary-treasurer. Elected to the Board of Censors were Y. H. Yarbrough, Charles Fulghum, and H. D. Allen, all of Milledgeville. Delegates include Thomas B. Phinizy and M. E. Smith, with Wallace M. Gibson, and Zeb Burrell, Jr., alternates.

John E. Beck, Decatur, has been elected president of the DEKALB COUNTY MEDICAL SOCIETY. Serving with Dr. Beck and Robert B. Ansley, president-elect, and Henry G. Carter, secretary.

At a recent meeting of the EMANUEL COUNTY MEDICAL SOCIETY, C. E. Powell, Swainsboro, was named president. Other officers elected were Randall G. Brown, vice-president; H. Wilder Smith, secretary-treasurer; and Robert Moye, delegate.

Harold P. McDonald assumed the presidency of the FULTON COUNTY MEDICAL SOCIETY at the 53rd anniversary banquet which the society held recently at the Piedmont Driving Club in Atlanta. In his address to the group, the new president decried the scarcity of hospital beds in Atlanta, advocated the development of a strong Emory medical school, and spoke for a new program for training interns and residents in Atlanta hospitals. Other officers chosen for the year of 1958 were James H. Byram, president-elect, Linton H. Bishop, Jr., vice-president; W. Vernon Skiles, judicial

councilman; T. Sterling Claiborn and John T. Godwin, trustees; Fleming L. Jolley, Edwin C. Evans, B. L. Shackleford, W. Walker Bryan, John Turner, Marvin A. Mitchell, and John S. Atwater, delegates.

At this same meeting, the following doctors received 25 year membership certificates: B. Hartwell Boyd, Clyde L. Crawford, W. A. Kelley, Elbert Van Buren, Richard M. Nelson, Stacy C. Howell, Don F. Cathcart, Martin T. Myers, W. L. Thomason, and J. Mason Baird.

Guest speaker for the occasion was Dr. John Benjamin, assistant professor of urological surgery at the University of Rochester School of Medicine, Rochester, N. Y. Dr. Benjamin spoke on "Recent Developments in Visual Education."

New officers of the FRANKLIN-ELBERT-HART MEDICAL SOCIETY include Stewart Brown, Royston, president; Louis G. Cacchioli, Hartwell, vice-president; and Harold E. Campbell, Elberton, secretary-treasurer.

Robert L. Oliver, Savannah, is the new president of the GEORGIA MEDICAL SOCIETY. W. Osler Beddingfield, Savannah, is the president-elect; Peter L. Scardino, vice president; Ralph O. Bowden, treasurer; W. W. Osborne, secretary.

Newly elected officers of the GORDON COUNTY MEDICAL SOCIETY are J. E. Billings, president; Byron Steele, vice president; William Thompson, secretary; and Lewis Lang, delegate.

W. W. Stribling, Gainesville, was the guest speaker at a recent meeting of the HABERSHAM COUNTY MEDICAL SOCIETY. Dr. Stribling's topic was "Atypical Myocardial Infarct."

The HALL COUNTY MEDICAL SOCIETY has installed the following as officers for the new year: Rafe Banks, Jr., president; P. F. Brown, vice president; Hamil Murray, secretary-treasurer; and P. K. Dixon, delegate.

Frank Vinson, Fort Valley, has been named president of the PEACH BELT MEDICAL SOCIETY; William G. Talbert, Warner Robins, was chosen secretary-treasurer.

Six new officers were elected by the RUSSELL COUNTY MEDICAL SOCIETY at a recent meeting. Those named to office are: W. B. Mims, president; David T. W. Chi, vice president; James S. Mitchell, secretary; Norman S. Luton, treasurer; Clyde M. Knowles, public relations chairman; and Seth J. Floyd, chairman of the Board of Censors.

Virgil B. Williams, Griffin, is the new president of the SPALDING COUNTY MEDICAL SOCIETY. George T. Henry, Barnesville, is vice president and James Watkins, secretary-treasurer. The society recently held a joint meeting with its woman's auxiliary. Following a social hour and dinner, Mr. William Trotter, LaGrange attorney, spoke on medical legislation.

New officers of the WALKER-CATOOSA-DADE MEDICAL SOCIETY include Louis A. Williams, Ringgold, president; Norman H. Hutchinson, Trenton, vice president; E. M. Townsend, Ringgold, secretary-treasurer; Fred H. Simonton, Chickamauga, and Howard

C. Derrick, Jr., Lafayette, delegates; Thomas W. Alsobrook, Rossville, and Warren Terrell, Ft. Oglethorpe, alternates; Roy Pope, Jr., Chickamauga, John P. Hoover, Rossville, and George C. Vassey, Rossville, Board of Censors.

The WALTON COUNTY MEDICAL ASSOCIATION has elected the following new officers: M. W. Anderson, Social Circle, president; Lynn Huie, Monroe, vice president; and H. B. Nunnally, Monroe, secretary-treasurer.

At the January meeting of the WARE COUNTY MEDICAL SOCIETY, Dr. Arthur R. Nelson, Jacksonville, Florida surgeon, addressed the group on the subject of "Cardio-Vascular Surgery."

Daniel H. G. Glover, Jesup, has been elected president of the WAYNE COUNTY MEDICAL SOCIETY. Dr. Glover succeeds R. E. Miller as head of the group.

At a recent meeting of the SIXTH DISTRICT MEDICAL SOCIETY, Charles Jordan, Eatonton, was elected president and William A. Dodd, Wrightsville, vice-president. Waddell Barnes, Macon, is the society's new secretary-treasurer. At this same meeting Dr. Champ Lyons, Birmingham, Alabama, gave a talk on "Arterial Obstructions of the Blood Vessels of the Neck" and Vernon Knight, Nashville, Tennessee, spoke on "Urinary Tract Infections."

PERSONALS

The following Georgia physicians have been named associates of the American College of Physicians: THOMAS DEVANN JOHNSON, Albany; GLENVILLE ARKWRIGHT GIDDINGS, JR., LAMAR BATTS PEACOCK, GRATAN CROWE WOODSON, JR., all of Atlanta; WILLIAM EDWARD BEL-LAMY, JR. and B. SHANNON GALLAHER of Augusta; CHARLES MASON HUGULEY, JR., Emory University; WADDELL BARNES, Macon; and LAMONT EARL DANZIG, Savannah.

First District

RANDALL G. BROWN, Swainsboro, recently attended the Southern Medical Association meeting in Miami Beach, Florida.

The new president of the St. Joseph's Hospital in Savannah is A. H. CENTER, Savannah psychiatrist. Dr. Center has practiced neuro-psychiatry in that city since 1946. He is a diplomate of the American Board of Neurology and Psychiatry and consultant at Hunter Field and U. S. Public Health Service Hospital.

A. H. CENTER and OSCAR EMERSON HAM, Savannah psychiatrist and pediatrician, recently participated in a panel discussion at a meeting of the Virginia L. Heard PTA, Savannah.

ALBERT J. KELLEY, Savannah, who has recently been named chief of the medical staff at Savannah Memorial Hospital, was the guest speaker at the Blood Donors Gallon Club.

H. WILDER SMITH, Swainsboro, attended the American Medical Association Clinical meeting in Philadelphia, Pennsylvania recently.

SOCIETIES / Continued

IRVING VICTOR has been elected president of the Savannah Surgical Society. Dr. Victor succeeds PETER L. SCARDINO.

The Warren A. Candler Hospital medical staff, Savannah, has elected ALTON F. WILLIAMS, local physician, as president.

Second District

JAMES H. CROWDIS, JR., Blakely, was selected chairman of the 1958 Heart Fund Drive in Early County. This is the sixth consecutive year that Dr. Crowdis has served in that position.

DR. and MRS. L. E. HACKETT, Camilla, were honored guests at a covered dish supper given by DR. and MRS. THOMAS N. LUMSDEN at their home in Clarkesville. Dr. Hackett will soon be associated with Dr. Lumsden in the practice of medicine.

Members of the Worth County Hospital Authority have announced that T. C. JEFFORD, Sylvester physician, has given a lot to the hospital to be used for the erection of a nurses' home and for future expansion of the hospital. Dr. Jefford was also the donor of the original ground for the hospital.

JOHN A. MEIER, Albany orthopedist, has been appointed medical director of the local Easter Seal Treatment Center.

CHARLES H. WATT, JR., Thomasville, has been notified of his election to membership in the Southern Surgical Association, one of the oldest medical groups in the United States. Dr. Watt was one of 12 Southern surgeons elected at the 69th annual meeting.

W. F. ZIMMERMAN, Tifton, has been named president of the Greater Baldwin Association, Inc., a benevolent organization which furthers the interest of Abraham Baldwin College. Dr. Zimmerman is also president and general manager of the Southern Premium Stamp Company.

Third District

L. S. BOYETTE, Ellaville, has been elected president of the medical staff of the Americus and Sumter County Hospital.

Fourth District

J. S. HOLDER, J. W. CHAMBERS, C. MAX WHITEHEAD, W. M. HENDRICKS, and W. B. FACKLER, JR., all of LaGrange, announce the association of J. M. GRISAMORE with the Clark-Holder Clinic for the practice of surgery and also the removal of their offices from 304 Church Street to 303 Smith Street.

Fifth District

ALBERT ADAM BRUST, JR., Atlanta, was named a fellow of the American College of Physicians at a recent meeting of the Board of Regents of the College.

ABNER GOLDEN, Emory University, recently presented a paper on the subject of cosmic radiation at a meeting in Indianapolis of the American Association for the Advancement of Science.

Sixth District

Citizens of Gordon and Wilkinson County paid tribute recently to retiring local physician, GEORGE W. DUPREE, with a day held in his honor. Dr.

Dupree is a native of Wilkinson County. He graduated from the Atlanta Medical School (now Emory) in 1910. He returned to Gordon in 1921 where he practiced until his retirement last year. Dr. Dupree is a former Georgia state senator. He has served as Wilkinson County physician, has been a member of the Gordon City Council, and was a member of the Wilkinson County Board of Health.

Seventh District

THOMAS S. HARBIN, Rome, has accepted the chairmanship of the Big Gifts Committee in a local YMCA building fund drive.

VIRGINIA HAMILTON MALEY, Cartersville, spoke to members of the Cartersville Rotary Club recently on the subject of cancer. To illustrate her talk, Dr. Maley presented a cancer film "The Warning Shadow."

BYRON H. STEELE, Fairmount, is the new chief of staff at the Gordon County Hospital. He succeeds R. D. WALTER of Calhoun.

Eighth District

E. ADAMS DANEMAN, Waycross psychiatrist, has been made a diplomate of the American Board of Psychiatry and Neurology.

T. J. HAYWOOD, Brunswick, has been certified as a diplomate of the American Board of Pediatrics.

DR. and MRS. JAMES S. MAUGHAN, Valdosta, announce the arrival of a son, James Sidney Maughan, Jr., born December 19.

J. W. YEOMANS, Jesup, is the new chief of staff for the Jesup and Wayne County Emergency Hospital.

FRANK B. MITCHELL, Brunswick, has announced that EUGENE C. KANE, St. Simons, will be associated with him in the practice of medicine.

ARTHUR M. KNIGHT, JR., Waycross, was one of the faculty members of the postgraduate course in Diabetes and Basic metabolic Problems held in Atlanta recently. The subject of Dr. Knight's clinical lecture was "Hypertensive and Cardiac Complications."

Ninth District

L. G. HICKS, JR., Clarkesville, gave a talk on medical teamwork at a meeting of the Clarkesville Volunteer Service group.

GEORGE T. NICHOLSON, Cornelia, has been appointed Georgia chairman for the American Medical Education Foundation.

The *Journal* regrets to announce the death of Mrs. Eugene Ward, wife of EUGENE L. WARD of Gainesville.

Tenth District

WILLIAM H. MORETZ, Augusta, was one of the speakers at the Savannah Symposium on Cancer. Dr. Moretz's topic was "Cancer of the Colon."

J. L. WALKER, Clarkesville, chairman of the MAG Rural Health Committee, will participate in the program of the 13th National Conference on Rural Health to be held in Jackson, Mississippi in March. Dr. Walker will be a member of a panel which discusses "What the Patient Expects of the Doctor—What the Doctor Expects of the Patient."

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The Man on the Cover

Why, natch', this doc's going to the MAG Annual Session in Macon, April 27-30! Hope to see you there, too.
Photo by Harold M. Lambert Studios.

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MANAGEMENT OF THE PATIENT WITH RHEUMATOID ARTHRITIS

The author's experience with hundreds of arthritic patients forms the background for this discussion of the advantages and limitations of modern methods of therapy.

WILLIAM B. RAWLS, M.D., *New York 21, N.Y.*

RHEUMATOID ARTHRITIS has always been foremost among the diseases considered difficult to manage. It is a collagen disease which eventually involves all the tissues and joints and leads to crippling and deformity.

In our zeal to treat the disease, however, we must never forget that it is *the patient* who requires not only treatment but our understanding and guidance, patience, and perseverance. For these reasons I have entitled my paper "The Management of the Patient with Rheumatoid Arthritis." I shall concentrate on the practical, outlining a few shortcuts to differential diagnosis and discussing the therapeutic measures which I believe you will find of value in the management of your patients. The statements I shall make are based upon a recent survey of 1000 office patients, of whom 350 were receiving steroid therapy and 650 were given other types of therapy.

A well-rounded program consists of first, general measures such as exercise, rest, and allaying pain and mental worries with aspirin, codeine, sedation and psychotherapy; second, physiotherapy and home measures; third, such therapeutic measures as gold salts, phenylbutazone, the steroids and various combinations of these preparations. In every instance the patient must be considered as an individual, not just a case of rheumatoid arthritis, and individual requirements must govern the selection of treatment.

Presented at the Annual Session of the Medical Association of Georgia, Savannah, Georgia, May, 1957.

Diagnosis

In rheumatoid arthritis the small joints of the extremities usually are the first to be affected. The involvement is bilaterally symmetrical and is characterized by a spindle-shaped swelling of the proximal interphalangeal joints, atrophy of the interossei muscles, thickening of the metacarpophalangeal and wrist joints, all of which result in the appearance of the saddle-back hand.

The distal interphalangeal joints are never involved in rheumatoid arthritis unless it is associated with psoriasis. This last disease entity is known as arthropatica psoriatica, and in this group the swelling and inflammation of the distal interphalangeal joints are greater than in the proximal joints. Figure 4 illustrates the marked bone destruction in the distal phalanges.

The sedimentation rate in rheumatoid arthritis is usually elevated to 25 mm. or more per hour (Westergren Method). Some patients, however, have a normal sedimentation rate.

Still's Disease. This disease occurs in early childhood and is believed to belong to the rheumatoid arthritis group. It is associated with an enlarged spleen and frequently with fever. Treatment is essentially the same as in the case of adult rheumatoid arthritis.

Strumpell-Marie Arthritis or Ankylosing Spondylitis. This disease involves the spine primarily and is characterized by calcification of the spinal ligaments, which gives the appearance of a bridging between



Figure 1 (Left) shows crippling effect of advanced rheumatoid arthritis. Figure 2 (Center) illustrates effect upon small joints of extremities in an early case. Figure 3 (Right) depicts the typical saddle back hand associated with the disease.

the vertebrae. Figure 5 shows the typical rounded back found in this disease. The treatment here again is essentially the same as in rheumatoid arthritis except that x-ray therapy gives considerable relief in most instances and may bring about a more prolonged remission than other forms of therapy.

Therapy: General Measures

A great many rheumatoid arthritis patients have a low basal metabolic rate, rapid pulse, anemia, and weight loss. Some have absence of free hydrochloric acid in the stomach, and others have liver damage. To achieve optimal results, we must try to correct any condition that affects the general health of the

patient. Sedatives for insomnia and codeine (grains $\frac{1}{4}$ or $\frac{1}{2}$) with 10 grains of aspirin at bedtime will give most of these patients a few hours' rest. They are always worse in the morning and may require one or more hours in which to dress. This means that after not sleeping well, they frequently will be exhausted just from the effort of dressing. A hot bath, aspirin, and a small dose of codeine with the morning dose of steroid will help these patients get started.

Arthritic patients have a tendency to be depressed, and it is imperative that we realize that the life of these patients is anything but tranquil. Their greatest fear is of being crippled and confined



Figure 4: Marked bone destruction in the distal phalanges in patient with advanced case of rheumatoid arthritis.

patient. Multivitamin therapy, iron for the anemia, and dilute hydrochloric acid usually are indicated. The last named is required because an absence of free hydrochloric acid interferes with the absorption of vitamin B1. The diet of the arthritic patient needs only to be well balanced. Food fads have no therapeutic value.

The constant pain of arthritis wears away the resistance of the patient and may create serious neuropsychiatric problems in the emotionally unstable. Under such conditions it is foolish to expect improvement, regardless of the anti-arthritic measures em-



Figure 5: Typical rounded back found in patients suffering from rheumatoid arthritis.

to a wheelchair, of becoming incapable of making a living, and of being a burden to family or friends. Their psychological problems must be considered and solved, and their fears allayed; otherwise, you will have a rocky road in managing your patients.

You must never let them think you are discouraged or that you have exhausted every means available for their relief. I tell my patients at the onset that rheumatoid arthritis is not curable but that it is controllable and that they can be kept at their jobs. Most patients will be perfectly happy to take treatment under such provisions. I also tell

them that they have a chronic disease and the treatment must be measured in months or years but that they have to make the best of it, learn to live with their disease, and accept the fact that treatment may last even a lifetime. Finally, I point out that today the problem is not as hopeless as it was only a few short years ago and that we now have many new and potent weapons for combating the disease.

Physiotherapy, Home Appliances, Exercises

Many modalities are available for the relief of the patient: short wave diathermy, baking, massage, galvanic stimulation to combat marked stiffness, and whirlpool baths. All are valuable adjuncts when properly prescribed. Short wave diathermy and massage will frequently aggravate the symptoms in the acute phase, whereas moist heat will give considerable relief. Hydrocolator pads, which are available commercially, are easy to use and will provide good moist heat for 20 to 30 minutes. Hot tub soaks and contrast baths are also beneficial. A gadget known as a whirlabath is comparatively inexpensive, easy to attach in the bath tub, and perfectly safe to use since no electricity is involved. Many gadgets are available commercially to help make life more livable for the patient with rheumatoid arthritis. These range from back-scratchers to sticks for picking up objects on the floor or for opening and closing the oven door of a stove when the patient cannot bend forward.

For the arthritis patient the type of and amount of exercises should be individualized, just as you individualize the dose of gold salts or cortisone. If a patient is fatigued and has increased pain or stiffness after walking one or more blocks, then the amount of exercise was too great at the time. Fatigue and increased stiffness occurring on the following day are also an indication of overexercise.

In arthritis the synovial membrane is inflamed, and weight bearing may further irritate the condition. In general, the housewife and the businessman or woman obtain sufficient exercise through performing their daily routines. A patient at bed rest can exercise the knees, ankles, and hip joints to prevent stiffening or ankylosis.

Gold Salts Therapy

In my opinion, gold salts are valuable in the treatment of rheumatoid arthritis even though they may produce serious side effects. In this day of chemotherapy, however, the internist and the general practitioner need to adopt the attitude of the surgeon and face the fact in the use of modern methods of therapy, there is a calculated risk. The anesthesiologist knows that a 1 to 5,000 or 1 to 10,000 mortality risk is involved every time general anesthesia

is given to even a vigorous patient without cardio-pulmonary disease. The surgeon also knows that the risk varies with the type of operation to be performed and that it can be increased by such factors as coronary disease and dehydration. In selecting a mode of therapy, we should evaluate both the benefit possible and the risk involved. We must weigh the amount of improvement obtainable with the drug or method in question against the severity of the reactions that may occur and then estimate whether such reactions are irreversible. In other words, is the disease severe enough and the potential improvement sufficient to warrant taking the calculated risk? Since rheumatoid arthritis is a severe, progressive, and crippling disease, I believe the risks connected with gold salts and most other forms of therapy are more than justified. Furthermore, some risks and hazards must be chanced if we are to make any progress in the treatment of the disease. In the early days of therapy with sulpha drugs for example, it was estimated that the sulpha drug may have proved fatal in two per cent to five per cent of the patients. On the other hand, the death rate from pneumonia was reduced from 30 per cent to five per cent. By taking the risk, we saved 25 out of every 100 patients that contracted pneumonia.

The more severe reactions from gold may include hepatitis, anemia, agranulocytosis, thrombocytopenic purpura, bronchitis, encephalitis, gastroenteritis, or dermatitis.

In 1944 Rawls et al¹ described in detail the toxic reactions and dosage methods of chrysotherapy. Briefly, we usually begin with 10 mg. of gold sodium thioglucose (Solganol) intramuscularly twice each week for the first four weeks. If there are no untoward effects, 25 mg. is given once each week. If after 10 weeks on this increased amount the patient does not show improvement, the dose is slowly increased by five mg. or 10 mg. every two weeks until improvement occurs or until a weekly dose of 50 mg. is given. The dose never should exceed 50 mg. weekly at any time.

The patient should be observed closely during gold therapy. An occasional blood and platelet count and urinalysis are about all the laboratory work required. In an original platelet count of say 280,000 drops to 175,000, the gold should be omitted. The platelet count is then repeated weekly for one or two weeks. If the count rebounds promptly, the injections may be resumed cautiously. If, however, the platelet count continues to decrease or remains low for a long period, greater caution is necessary if the gold salts therapy is resumed. The advent of British Anti-Lewisite (BAL) gave us a useful method of combating toxic reactions to gold.

If a patient complains of malaise, nervousness,

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and loss of appetite, you should be suspicious of an early hepatitis and omit the gold therapy. When a patient complains of nervousness, irritability, insomnia, and states he "just doesn't feel right," you should suspect a beginning encephalitis and omit the gold. If the symptoms progress or persist, BAL should be given.

Our rule is to stop the gold salts upon the appearance of any symptoms whose cause cannot immediately be determined and institute treatment for the condition. We do not resume gold salts until the symptoms either disappear or are shown to have no connection with chrysotherapy. If a patient develops hepatitis or encephalitis, we do not, as a rule, resume the gold salts.

Phenylbutazone

Phenylbutazone, known under the trade name of Butazolidin, is an anti-inflammatory drug which is beneficial in many forms of rheumatic disease. It has given relief to patients with bursitis, myositis, or fascitis and has been of some benefit in patients with rheumatoid arthritis, particularly those with the trumpell-Marie type. I have often used it simultaneously with the steroids, thereby reducing the dose of the latter and avoiding hormonal side effects.

Phenylbutazone, however, may also produce side effects. These may be sodium retention with edema or gastrointestinal irritation with pain and flatulence and even gastric ulceration with hemorrhage. Employing a dosage of 100 mg. to 200 mg. per day, we have not encountered the latter. In my opinion, the most frequent and perhaps the most important of the side effects of phenylbutazone is a reduction of the total white blood cell count and the granulocytes. To minimize the danger of this, we routinely use a dose of 200 mg. a day, checking the white and differential counts weekly for three weeks and bimonthly thereafter.

A precipitous drop in total white or granulocyte levels is more significant than a gradual drop. If the total white count drops to between 4,500 and 5,000 or the granulocytes decline to between 45 per cent and 50 per cent, the dosage of phenylbutazone is decreased to 100 mg. daily or omitted, depending upon whether the decrease is gradual or rapid. If leukocyte or granulocyte levels should be lower than those just mentioned, the drug is stopped and the count repeated at weekly or biweekly intervals until normal values are obtained. When there has been only a slow and moderate decline in leukocyte values, the drug is resumed at a later date, and precautions outlined above are observed.

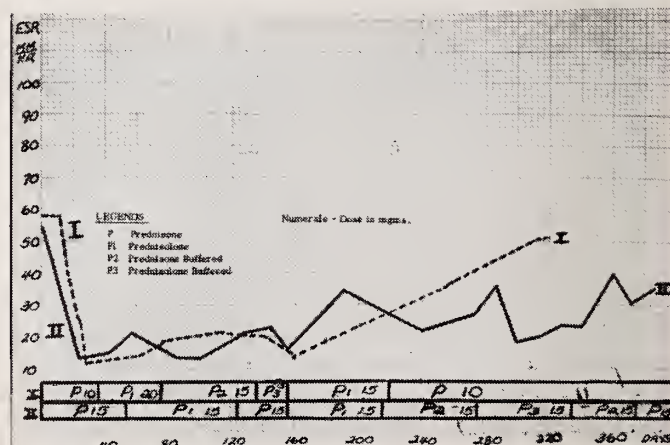
In a statistical analysis of 100 cases, (1) there was no correlation between length of therapy and

the white blood count or percentage of polys, and (2) both the total white and the differential counts tended to fluctuate widely in most cases. In a few cases when the white blood count reached 4,000 or the polys dropped to 40 per cent, the dosage of phenylbutazone was omitted for two weeks with the result that both values had risen at the following determination. Although random fluctuations in the counts may occur, it is advisable as a precautionary measure to discontinue therapy when the white count or percentage polys reaches the above levels.

The Steroids

(An analysis of 350 patients receiving steroid therapy and 650 not receiving steroid therapy.)

The steroids control the symptomatology of arthritis but do not cure it. It was originally thought that the disease continued to progress and that the steroids suppressed only the inflammatory manifestations, but now there are some, including myself, who believe that in selected cases the progress of the disease can be arrested by the steroids. Today four different preparations of oral therapy are available commercially: cortisone, hydrocortisone, prednisone*, and prednisolone*. In addition, two new compounds are currently under investigation in controlled experiments. Twenty-five milligrams of cortisone, the original preparation, is equivalent to twenty milligrams of hydrocortisone, five milligrams of prednisone, and five milligrams of prednisolone. Figure No. 6 shows that for practical purposes prednisolone and the buffered prednisones have similar



sentilaly the same, with the exception that prednisone and prednisolone are superior to cortisone and hydrocortisone in their anti-inflammatory action. To avoid tongue-twisting and heaviness in the remainder of this paper, I shall refer to cortisone and hydrocortisone as "the cortisones" and to prednisone and prednisolone as "the prednisones," except in instances where a particular steroid should be identified.

In July, 1951, I outlined our methods of using cortisone and suggested that the dose be individualized according to the needs of the patient. In rheumatoid arthritis we usually give an intial 50 mg. to 100 mg. dose of cortisone (or its equivalent) daily for seven to ten days and at the end of this time begin to reduce this slowly until we find the lowest dose that will maintain the patient in reasonable comfort. In our experience the average maintenance dose is 37.5 mg. to 75 mg. of cortisone, 30 mg. to 60 mg. of hydrocortisone, and 7.5 mg. to 15 mg. of prednisone or prednisolone. In order to maintain each patient on the lowest dose possible, we use every adjunct available. During flare-ups (to which every patient with rheumatoid arthritis is subject) the dose is increased as required for suppression of the symptoms. Each patient is allowed to adjust his own dose to fit the circumstances but is instructed to take the lowest possible dose that will allow him to live a comparatively normal life. Now, a word of warning. Some who have a low tolerance to pain, or for other reasons, will increase their dose to the point where they are completely pain-free. Others, because of the fierce competition in the business world, believe they must remain symptom-free so that it is not evident that they have arthritis. They have a real and justifiable fear that they will be passed over at promotion time if it becomes known that they have rheumatoid arthritis and might become disabled. All such patients must be cautioned about the hazard of overdosage.

Side Effects

Hair Growth. The prednisones will increase hair growth to the same extent as the cortisones. Since this effect can be most troublesome to women, the latter must be observed closely. In some instances hirsutism will disappear after the steroid is omitted, but in other instances it will not. Because the cortisones and prednisones may produce osteoporosis, we originally thought it advisable to administer small doses of androgens to patients with osteoporosis in order to prevent further extension of the process. We found that even small doses of androgens administered simultaneously with cortisones or prednisones greatly increased the rapidity and extent of hair growth to a degree far beyond that which would be expected from either the androgens

or the adrenal steroids alone. The same finding prevailed when a so-called balanced formula of androgens and estrogens was used.

"Cushing Syndrome." The "Cushing syndrome" of steroid therapy is a symptom complex characterized by moon face, weight gain, and their growth. Moon face occurs with the same frequency and to the same extent with the prednisones as with the cortisones. This particular symptom usually appears after administration of large doses of the steroids for a comparatively short period of time, such as several weeks, or after administration of relatively small doses over a long period of time, such as months or years. Moon face will disappear, however, upon omission of steroid therapy. The edema and weight gain that frequently occur with the cortisone are encountered only rarely with the prednisones.

Blood Sugar. In seven years of administering steroid therapy, I have had only three patients develop an elevated blood sugar and glycosuria. Two had a blood sugar of between 135 mg. to 150 mg.; the third had a blood sugar of 194 mg. with a four plus urine sugar. These returned to normal three weeks after omission of therapy. Figure 7 shows that of 50 patients receiving the cortisones and prednisones for one to four years, the blood sugar was normal in every instance, and sugar was not found in the urine. The urea and uric acid have also remained normal.

Blood Cholesterol. Rawls ea al.³ demonstrated

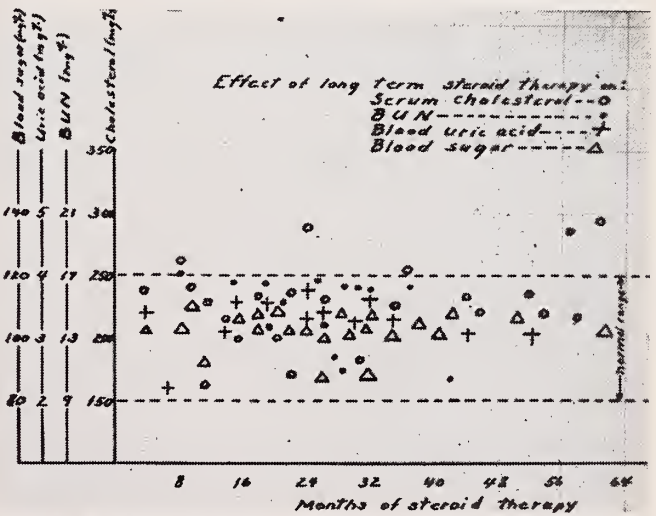


Figure 7: Blood sugar normal in patients receiving cortisones and prednisones for four years.

that no single determination of blood cholesterol is of much value since this test varies as much as 100 mg. per cent. Figure 8 shows that there was no appreciable change in repeated determinations of cholesterol in two patients receiving hydrocortisone for 320 to 360 days. Any conclusion to the effect that the steroids increase the cholesterol content of the blood must be based upon frequent determinations repeated over weeks or months.

We have ceased to do frequent chemistries or

ESOPHAGEAL LESIONS / Cope

urinalyses since in our experience they have been unnecessary. An occasional check is sufficient. The patient should be asked to report any occurrence of excessive thirst, polyuria, or loss of weight. We do not give potassium routinely because of the frequency of gastrointestinal symptoms following its use. The prednisones do not, as a rule, cause sodium retention. If sodium retention and edema should

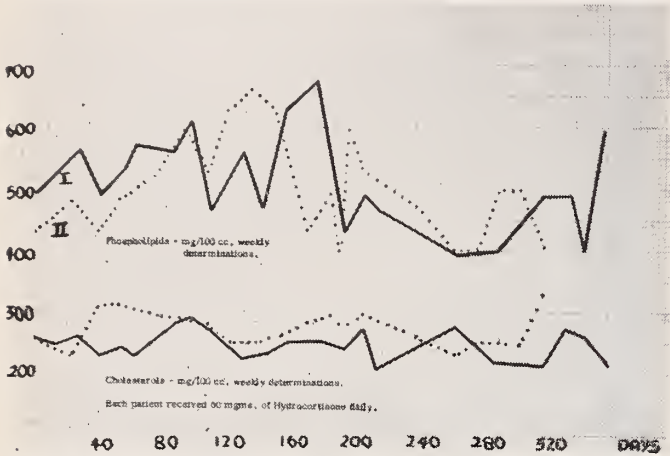


Figure 8: In two patients receiving hydrocortisone for 320 to 360 days, there was no appreciable change in repeated determinations of cholesterol.

occur, however, potassium should be administered, and its use is almost mandatory if mercurial diuretics are given.

Gastrointestinal Symptoms. The prednisones will produce gastrointestinal irritation fully as great as that produced by the cortisones. Only one of my patients in the steroid group has developed a massive gastric hemorrhage. The patient, a white male of 75 years, had a hypertrophic gastritis. However, two of my patients not receiving steroid therapy also developed massive gastric hemorrhage. Some patients were given steroid therapy even though there was a definite history of gastric or duodenal ulcer. In these instances the handicap and disability were so severe that the patients willingly accepted the hazards of steroid therapy. However, in the presence of a gastric or duodenal ulcer or the history of one, steroid therapy should be administered with caution. The use of buffered prednisones will reduce the gastrointestinal irritation in most instances.

Thromboembolic Phenomena. In the early days of steroid therapy, it was believed that these compounds played an important role in the production of thromboembolic phenomena. In 1952, however, Rawls⁴ stated that he did not believe that the steroids played as important a role in the production of thromboembolic phenomena as was originally thought and that it might be necessary to reorient our thinking on this subject.

Today the steroids are being used in the treatment of superficial thrombophlebitis, apparently with good results⁵. It is possible that some of the cases reported as thromboembolic phenomena due to cortisone were really just chance. When working with patients of an age group in which certain circulatory diseases are likely to develop, it is not reasonable to attribute all such occurrences to the therapeutic agent used. Figure No. 9 shows the incidence of thromboembolic phenomena in two groups of patients of approximately the same average age. Only one group was receiving steroid therapy. Thromboembolic phenomena occurred in nine or 2.57 per cent of those given the steroid and in 31 or 4.77 per cent of those not receiving steroid therapy.

Infection. There has been a great deal of discussion about the frequency of infection and its lack of response to antibiotic therapy in those receiving the steroids. The difficulty is not lack of response to antibiotic therapy or loss of resistance in the patient but the shock that occurs when the steroid is omitted. For example, one of my patients contracted pneumonia in the early days of steroid therapy and was taken care of by his family physician. As was the custom at the time, the steroid was omitted. In spite of large doses of antibiotics and the fact that his temperature was 98°F., the patient was critically ill. The blood pressure was 80 systolic and 60 diastolic. Shortly after reinstitution of steroid therapy the blood pressure rose to normal, and the patient made an uneventful recovery. Fig. No. 9 shows that the percentage of patients developing pneumonia was lower among those on steroid therapy than among those not receiving the steroids. The concept that wound healing was seriously impaired by the steroids has been completely disproven today, and it is my

	Av. Age	T.No	CeT	%	No CoT	%	TP	%	No Pn	%	CHF	%	GH	%	DIA	%	OP	%
Steroids	48	350	2	.57	4	1.14	3	.85	3	.85	1	.28	1	.28	0	0	2	.57
No Steroids	50	650	9	1.39	15	2.31	7	1.08	6	.93	5	.77	2	.31	9	1.38	4	.54
		1,000	11		19		10		9		6		3		9		6	

Figure 9: Av. Age—Average age for entire group; T.No—Total number in each group; CeT—Cerebral thrombosis; CoT—Coronary Thrombosis; TP—Thrombophlebitis; Pn—Pneumonia; CHF—Congestive heart failure; GH—Gastric hemorrhage; DIA—Diabetes; OP—Osteoporosis.

I	-	13 patients showed no change in the ECG during therapy.														
		Case No.	1	—	Normal ECG prior to steroid. The ECG was still normal after 16 months of treatment											
		Case No.	2	—	"	"	"	"	"	"	"	33	"	"	"	
		Case No.	3	—	"	"	"	"	"	"	"	8	"	"	"	
		Case No.	4	—	"	"	"	"	"	"	"	24	"	"	"	
		Case No.	5	—	"	"	"	"	"	"	"	2	"	"	"	
		Case No.	6	—	"	"	"	"	"	"	"	36	"	"	"	
		Case No.	7	—	"	"	"	"	"	"	"	9	"	"	"	
		Case No.	8	—	"	"	"	"	"	"	"	30	"	"	"	
		Case No.	9	—	"	"	"	"	"	"	"	9	"	"	"	
		Case No.	10	—	"	"	"	"	"	"	"	22	"	"	"	
		Case No.	11	—	"	"	"	"	"	"	"	22	"	"	"	
		Case No.	12	—	"	"	"	"	"	"	"	36	"	"	"	
		Case No.	13	—	Right bundle branch block prior to steroid. No change after 11 months of treatment											
II	-	2 patients with an abnormal ECG prior to therapy, showed a reversion toward normal during treatment.														
		Case No.	14	—	EGG showed intraventricular conduction delay prior to steroid. After 5 months of treatment the ECG had returned to normal.											
		Case No.	15	—	ECG showed low to flat T waves prior to therapy. After 11 months on steroid, the ECG had returned to normal.											

Figure 10: ECG Changes Occurring During Long Term Steroid Therapy.

opinion that the conclusion that steroids predispose the patient in infections is also erroneous. In my own experience they do not except in rare instances. If there is a history of tuberculosis, we do not give any of the steroid because supposedly definite evidence of reactivation of tuberculosis has been observed with steroid therapy. This is a subject still under research. Today, however, patients with tuberculous meningitis are given simultaneous steroid and antimicrobial therapy, and the results are better than those obtained with antimicrobial therapy alone.

Cardiac Complications. In our series cardiac failure occurred in one case or 0.28 per cent of 350 patients on steroid therapy and in five cases or 0.77 per cent of 650 patients not taking steroids. In compiling these figures, we used only the cases of congestive failure in which the etiology was not clearly coronary thrombosis or rheumatic fever. If, however, we include failure following coronary thrombosis, the ratio of the percentage developing congestive failure in the group without steroid therapy to the percentage in those taking steroids is even greater. From the analysis of 1,000 office patients as shown in Fig. 9, thromboembolic phenomena, pneumonia, congestive heart failure, massive gastric hemorrhage, diabetes, and osteoporosis appear to occur less frequently in patients receiving steroid therapy than in those not on steroid therapy, and the age differential is not significant. These figures do not agree with some that have been published, but our lower figures may be due to the consistent low dosage (5 mg. to 10 mg. of the prednisones) employed in a vast majority of our patients.

The exact role that the steroids play in cardiac complications is in my opinion unknown at present. Certain facts are emerging, however, and the following statements are based upon my own experience and a review of the literature.

(1) In attributing cardiac involvement to steroid therapy, many authors apparently have given little

or no thought to the incidence of these complications in patients of a comparable age group who have never received steroid therapy. They have failed to take into consideration the fact that these same conditions can occur regardless of therapy.

(2) In many instances insufficient consideration has been given to the pathology of rheumatoid arthritis. Rheumatoid arthritis is a collagen disease, and the patient with rheumatoid arthritis may develop any one or all of the conditions found in collagen disease, such as myocarditis or polyarteritis, and either of these conditions may prove fatal. Further, the patient presenting the most severe symptoms usually is given steroid therapy. Yet because of the severity of the rheumatoid involvement, he is the more likely to develop the more serious lesions of collagen disease. This fact in itself makes the patients receiving steroid therapy a selected group with a more aggressive disease process and a poorer prognosis.

(3) If cardiac failure should result from steroid therapy, gradual reduction of the hormone and use of diuretics will in most instances relieve the patient, and there will be no permanent damage. There has been considerable discussion concerning the possible role that the steroids or the sudden withdrawal may play in precipitating an acute collagen episode with polyarteritis, etc. A complete review of the literature and personal discussion with many outstanding workers in the field has failed, in my opinion, to fully substantiate the fact that the cortisones or prednisones are the precipitating factors in these episodes. However, one must not entirely ignore this possibility and should maintain his patients on as small a dose as possible and avoid sudden withdrawals of the steroids. If the cardiac failure persists in a patient who survives the initial episode, then one should suspect the presence of myocarditis or polyarteritis. Ogryzlo⁶ reported eight patients who had what appeared to be a fulminating type of rheumatoid di-

RHEUMATOID ARTHRITIS / Rawls

sease. Six of these patients succumbed to the rheumatoid process and illustrated what he stated might be considered the terminal course of the disease. The

J P 63 year old white male

Case no 15

Before steroid therapy



After 11 months on steroid



Figure 11: Electrocardiogram in Case 15 before and after 11 months of steroid therapy.

autopsy findings included fibrinous pericarditis, fibrinous pleurisy, areas of diffuse and perivascular myocardial fibrosis or round cell infiltration, and vascular changes including periadventitial fibrosis.

Weinberger⁷ reported vasculitis in fifteen patients with rheumatoid arthritis, in some of whom the lesions were indistinguishable from the arteritic le-

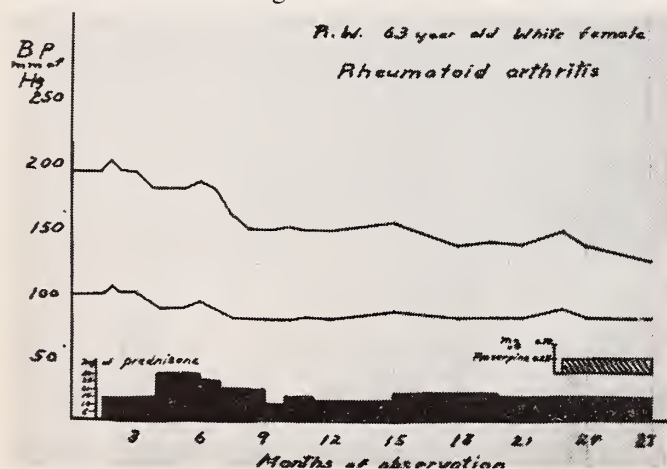


Figure 12: Reduction of blood pressure under steroid therapy.

sions of periarteritis nodosa. He concluded that these findings supported the concept that arteritis may form part of the basic pathological process of rheumatoid arthritis. Sokoloff, Wilens, and Bunim⁸, Slocumb⁹, Holbrook¹⁰, and White¹¹ reported essentially similar findings.

It appears, therefore, that cardiac involvement from the disease process per se is neither uncommon nor infrequent. The next question to arise is whether cardiac involvement occurs more frequently in rheumatoid arthritis patients following steroid therapy.

Fig. No. 10 summarizes fifteen patients who had electrocardiograms before and at varying intervals after the institution of steroid therapy. In thirteen

no change in pattern occurred during treatment that ranged in duration from 12 to 36 months. In two instances there was an acute reversion to normal.

Fig. No. 11 shows the electrocardiogram in Case 15 before and after 11 months of steroid medication. The increase in amplitude of the T wave is best seen in leads I, II, and V5.

In some patients with salt and water retention and mild dyspnea, we have been unable to find evidence of myocardial involvement, and recovery has been complete with gradual reduction in steroid dosage and use of diuretics. In our opinion, cardiac failure occurring in steroid-treated rheumatoid arth-

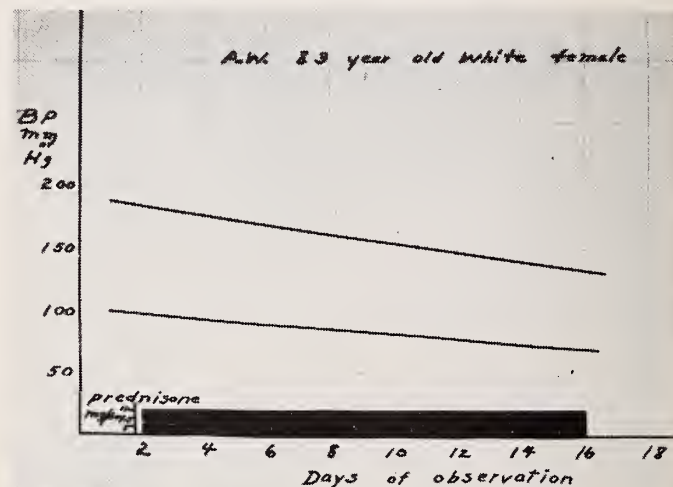


Figure 13: Blood pressure chart of 43 year old female after treatment with cortisone and prednisone, respectively.

ritis is due primarily to the disease process involving the myocardium and not to salt and water retention secondary to the therapy. Kemper et al.¹² have suggested that in certain susceptible individuals with rheumatoid arthritis the administration of cortisone may precipitate the development of diffuse necrotizing arteritis. An acute collagen flare-up like this is

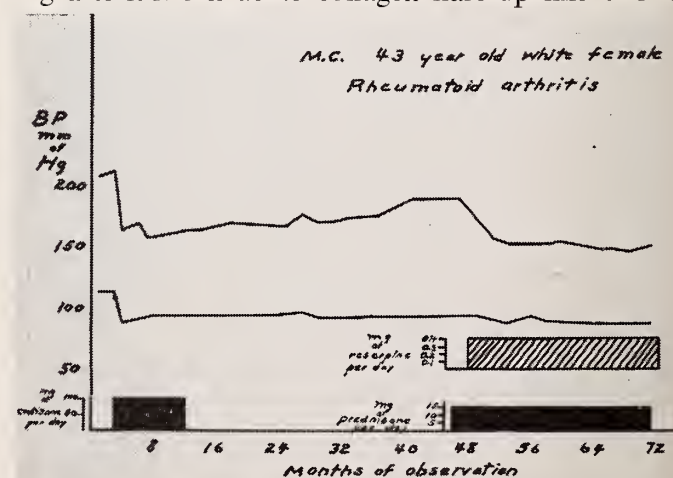


Figure 14: Fall of blood pressure with elimination of pain and anxiety.

associated with generalized aching, increased joint pain, fatigue, etc., and may closely resemble an exacerbation of arthritis. Slocumb⁹ has reported a similar set of symptoms encountered clinically in patients with hypercortisonism or in whom cortisone

had been suddenly withdrawn. It is obvious that such a chain of symptoms occurring in steroid-treated rheumatoid arthritis may pose a very difficult diagnostic and therapeutic problem that in some instances can be clarified only in the light of ensuing events.

Patients with rheumatoid arthritis may develop

JOINTS	DIJ	PIJ	MCJ	WRISTS	EL	SH	HIPS	KNEES	ANKLES	TOES
Rheumatoid	127	6348	3610	1102	3038	2449	1220	9547	1108	1128
Osteo	4652	1462	0	88	312	1302	910	13203	302	52
Total	4779	7810	3610	1190	3350	3751	2130	22750	1410	1180

Figure 15: Distal interphalangeal joints; PIJ—Proximal interphalangeal joints; MCJ—Metacarpo phalangeal joints; WR—wrists; EL—elbows; SH—shoulders.

all the pathologic processes peculiar to collagen disease, including polyarteritis and also may suddenly develop an acute fulminating type of collagen disease commonly referred to as the lupus-like reaction. Polyarteritis or necrotizing arteritis may involve all the arteries of the body, including those of the heart. This type reaction usually presents the picture of a gravely ill patient, and if the arteries of the heart are involved, the predominating symptoms may be those of heart failure.

Hypertension and Simultaneous Administration of Steroids and Hypotensive Drugs

In treating patients with severe rheumatoid arthritis and hypertension, one is faced with the dilemma as to whether to administer the steroids. The risk involved must be weighed against the results to be obtained.

Fig. 12 shows that in a patient with severe rheumatoid arthritis and hypertension the blood pressure

JOINTS	DIJ	PIJ	MCJ	WRISTS	EL	SH	HIPS	KNEES	ANKLES	TOES
Multi size	27x1/2"	27x1/2"	27x1/2"	23x1-1/4"	23x1-1/4"	22x2"	20x3"	22x2"	23x1-1/2"	27x1/2"
Dose	0.2cc	0.2cc	0.3cc	1cc	1cc	1cc	1to2cc	1to2cc	1cc	0.2cc
Anesthetic	none	none	none	1% cyl	1% cyl	1% cyl	1% cyl	1% cyl	1% cyl	none

Figure 16: Distal interphalangeal joints; PIJ—Proximal interphalangeal joints; MCJ—Metacarpo phalangeal joints; EL—elbow; SH—shoulders; Cyl—cyclaine.

was gradually reduced as the arthritis improved under steroid therapy. We attributed this to the lessening of anxiety, which in turn resulted from the lessening of the arthritic symptoms. You will note that in the twenty-second month of therapy, reserpine was added to her regimen and that there was a further drop in blood pressure to within normal range for one of her age. This patient now requires a minimal dose of 10 mg. of prednisone per day for reasonable comfort. If blood pressure rises with steroid therapy or does not decrease upon subsidence of the arthritic symptoms, we add hypotensive drugs to the regimen.

Fig. 13 shows another patient with hypertension who received cortisone, with an initial reduction in blood pressure. At the end of about 36 months, however, there was a gradual rise in the pressure, and

at 46 months prednisone was instituted. Two months later hypotensive drug therapy was added to the regimen, and there was a further reduction of the pressure.

Fig. 14 demonstrates the rapid fall of the blood pressure in a short period as the patient's pain and anxiety were relieved. Although an increase in blood

pressure may occur with the prednisone, it occurs much less frequently than with the cortisones. In some patients the hypertension will remain stationary, but if it increases, antitensive agents are added. If the hypertension increases to a great extent, the steroids are omitted. We then institute intensive therapy with hypotensive drugs, and if successful, again try steroid therapy in small initial doses in conjunction with the hypotensive drug. This has been successful in a number of instances.

Intra-articular Injections of Hydrocortisone Acetate* and Prednisolone Tertiary Butyl Acetate*

Fig. 15 shows the number of different joints injected and the number of patients with rheumatoid arthritis and with osteoarthritis. During the past five years I have injected 51,960 joints. There have been three infections, of which two were in the distal interphalangeal joints of the right index finger in right-handed individuals and the third in the distal

interphalangeal joint of the right middle finger. Even though only 0.2cc of the hydrocortisone is injected into the joints, it is introduced under pressure, and some may be extravasated back through the needle entrance. This may be a potential entrance for infection. We now use very small band aids that fit snugly over the point of entrance of the needle and tell the patient to keep them in place for 48 hours and to keep the fingers as clean as possible.

Fig. 16 gives the dose and size of needles used. The results have been uniformly good both in rheumatoid and osteoarthritis. In many patients with rheumatoid arthritis and multiple joint involvement, all except one or two joints may become comparatively symptom-free with other forms of

*The hydrocortisone acetate and the prednisolone tertiary butyl acetate used in this study were furnished by Sharp and Dohme, Division of Merck and Company, Inc.

RHEUMATOID ARTHRITIS / Rawls

therapy, and hydrocortisone is a useful adjunct when injected into the recalcitrant joints. It brings the improvement in these joints in line with the others and in many instances allows us to keep the dose of the steroid considerably smaller than might otherwise be possible. In many patients where untoward side effects developed from steroid therapy and the total dose had to be reduced, the use of intra-articular injections kept the patient comfortable. Fig 17 shows the effect of intra-articular hydrocortisone on the joint fluid cell count.

The Steroids Combined With Salicylates

Today there are a great many preparations of steroids combined with some form of salicylates on the market. These preparations are a convenience for the patients, and the salicylates are beneficial in

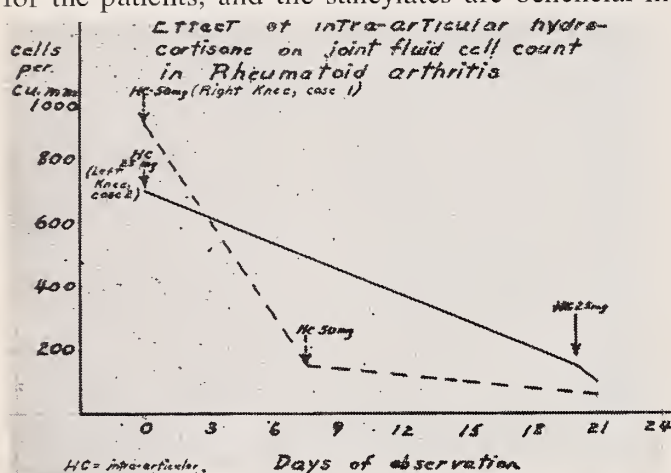


Figure 17: Effect of intra-articular hydrocortisone on the joint fluid cell count.

helping to carry your patients on a lower maintenance dose. They usually contain one or two mg. of one of the prednisones. The combinations have no particular therapeutic advantage over the same dose of the drugs when given separately.

Steroid Compounds With Tranquilizing Drugs

During the past few weeks we have been using a combination of Meproamate and prednisolone. In one preparation there are 200 mg. of meproamate and one mg. of the steroid and in the other, 200 mg. of meproamate and two mg. of the steroid.* In patients with rheumatoid arthritis who are nervous, depressed, anxious, and unable to sleep, this combination has given considerable relief. Its advantage lies in its capacity to relieve nervous tension and anxiety, thus enabling the patient to obtain more rest and sleep.

When excess fluid in the joints has persisted in spite of steroid therapy, we have used diuretics such as acetazolamide and chlorothiazide.* These patients did not have sodium retention, and the excess joint

*These preparations (Meproline No. I and II, and chlorothiazide) were furnished by Sharpe and Dohme, Division of Merck and Company, Inc.

fluid in four patients, moderate reduction in three, and none in four. The acetazolamide and chlorothiazide must be continued, however, for when it is omitted, the fluid reappears in the joint.

Simultaneous Administration With ACTH and Cortisone

A few years ago Rawls et al. demonstrated in hypophysectomized rats that ACTH would cause an increase in the weight of the adrenal gland, even though the recipient was receiving cortisone. This indicated that it would prevent adrenal atrophy when given simultaneously with the cortisones. Since that time we have given some of our patients on long-continued cortisone therapy ACTH at the same time. This is usually 20 to 40 units once or twice each week, depending to an extent upon the amount of cortisone the patient is taking.

A New Steroid: Triamcinolone (Orion)

A preliminary report on the effects of 16 alpha-hydroxy-delta 1-9 alpha-fluoro-hydrocortisone (Orion) in 53 patients, 31 of whom had been on this preparation for more than three months, was made at the annual meeting of the New York Rheumatism Association on April 9, 1957, by Dr. Richard S. Freyberg and his group¹⁴. This steroid produced no sodium retention but an initial salt and water loss, which resulted in a loss of two to four kilograms of body weight and then a leveling off of weight. Some patients with edema from some of the other cortisone preparations obtained a reduction of the edema. The steroid preparation was beneficial in both rheumatoid arthritis and disseminated lupus erythematosus. There was no electrolyte problems, but rounding of the face occurred in nine patients, purpura in two, hirsutism in three, and a change in glucose metabolism in three, with the development of diabetes in a pre-diabetic patient. In 10 patients with peptic ulcer who received Triamcinolone, x-rays revealed that two were healed, the lesions were smaller in four and unchanged in three patients. One did not have follow-up x-rays. There was no exacerbation of ulcers or new ulceration in any patient receiving Orion. The doses ranged from four mg. to 28 mg. and averaged 10 mg. to 15 mg. The dosage appeared to be comparable to that of the prednisones. Some patients who were formerly taking prednisolone were changed to Orion, with improvement in some and no change in others. In no patient was there a worsening of the arthritis, and in many the sedimentation rate was further reduced by Triamcinolone.

Summary

I have tried to bring to you the measures which have been found in my practice to be most beneficial in the management of the patient with rheumatoid arthritis. I have also tried to point out some of the

dangers associated with modern therapy. There is no cure, but if the tools now available are properly used, relief and control can be accomplished in most instances. No other disease will tax the ingenuity and patience of the doctor or require a wider knowledge of the entire field of medicine and more thorough understanding of each individual patient than does rheumatoid patients. I hope that I have succeeded in helping you, even in a small way, to better understand and manage your patient with rheumatoid arthritis.

654 Madison Avenue

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Medical College of Georgia

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ART OF THE PRACTICE OF MEDICINE
COURSE SCHEDULE

Small Auditorium
Education Building

Talmadge Memorial Hospital
Medical College of Georgia

March 22 — 12:00 noon . . . "HOSPITAL RELATIONS"

David Henry Poer, M.D., Atlanta—General Surgeon; Assoc. in Surgery, Emory University School of Medicine; Assoc. Chief of Surgical Service, Piedmont Hospital, Atlanta.

April 5 — 12:00 noon . . . "PHYSICIAN AND HIS FAMILY"

Paul Reith, M.D., Atlanta and Warm Springs—Orthopedic Surgeon; Asst. Professor of Anatomy and Lecturer in Surgical Anatomy, Emory University School of Medicine; Director of Surgery, Warm Springs Foundation, Warm Springs Foundation, Warm Springs; Active Staff Emory University Hospital and Georgia Hospital, Atlanta.

April 19 — 12:00 noon . . . "M.D.'s PERSONAL ECONOMICS"

Mr. Virlyn B. Moore, Jr., Atlanta—Vice President and Trust Officer, Fulton National Bank of Atlanta; President Woodrow Wilson Law School, Atlanta; Estate and Planning Officer and Investment and Insurance Councilor.

May 3 — 12:00 noon . . . "CONTINUING MEDICAL EDUCATION"

Arthur M. Knight, Jr., M.D., Waycross—Internist and Cardiologist; Chief of Medicine, Memorial Hospital, Waycross; Chief of Ware County Heart Clinic; Consulting Physician Atlantic Coast Line Hospital, Appling General Hospital, Appling General Hospital, Pierce County Hospital, Douglas Coffee Conuty Hospital.

May 17 — 12:00 noon. . . "ETHICS"

Hal M. Davison, M.D., Atlanta—Internist and Allergist; Past-President, Medical Association of Georgia; Formerly Chief of Medicine, Georgia Baptist Hospital, Atlanta.

May 30 — 4:00 p.m. . . . "RELIGIOUS ASPECTS OF MEDICAL PRACTICE"

The Rev. Charles V. Gerkin, Atlanta; Chaplain-Supervisor, Grady Memorial Hospital.
The Rev. R. Donald Kiernan, Cedartown; Pastor, St. Bernadette Church, Cedartown.
Mr. Sidney Parks, Atlanta; Attorney. Senior Faculty Member, Ahavath Achim, Religious School.

5:00 p.m. . . . "SENIOR DAY" SOCIAL HOUR AND BUFFET SUPPER

(Courtesy of Mead Johnson Company)

A COMBINED RIGHT THORACO-ABDOMINAL APPROACH TO HIGH ESOPHAGEAL LESIONS

JEROME A. COPE, M.D., and ROBERT G. ELLISON, M.D., *Augusta, Ga.*

THE SURGICAL TREATMENT of lesions of the esophagus, benign as well as malignant, has until recently presented a dark and forboding picture. At the present time the picture can be portrayed in brighter hues with a more optimistic overtone. This is especially true in benign lesions. Formerly, many lesions of the esophagus and cardia frequently pursued a "malignant" course. Surgical maneuvers directed at even these lesions were fraught with a high morbidity and frequent disaster. Carcinoma of the esophagus was usually a "hands off" policy, or even worse, these patients were afflicted with a gastrostomy.

At the present time surgery of the esophagus is still of a magnitude that provokes deliberate hesitancy. With present day surgical knowledge and techniques, however, the morbidity and mortality rates of esophageal surgery are approaching more acceptable figures, particularly in benign lesions and strictures. Patients with benign lesions and occasionally certain strictures should now be offered the benefit of surgical assistance if they are otherwise good surgical risks.

Surgery in carcinoma of the esophagus is still formidable in its basic aspect. While technically more feasible, the final result, in so far as "cure" of the malignant disease is concerned, remains infrequent. However, one can expect better results in the future through earlier recognition of the disease. There is some evidence that lymph node metastasis is a relatively late phenomenon in carcinoma of the esophagus. The goal may be, therefore, diagnosis of carcinoma of the esophagus before local invasion makes the lesion non-resectable. The few scattered reports of five year survival following resection for esophageal malignancy allow one to adopt a somewhat hopeful attitude. In many patients, the benefits derived from a palliative resection for carcinoma justify operative intervention.

In any field of surgical endeavor strewn with misfortune, many and varied techniques appear for attaining a single goal. Such has been the case in

An attitude of hopelessness is no longer justified. The authors' experiences in esophageal lesions are reviewed.

esophageal surgery. We wish to confine our remarks primarily to a limited facet, namely, surgical approach.

Extrapleural Approach

The extrapleural approach, which has been used in past years, has little to recommend it. Usually, the esophagus does not lend itself to segmental resection, such as is done in extrapleural surgery. Certainly, a "cancer operation" cannot be done with an extrapleural approach. From the time of the first esophageal resection by Mikulicz (although antedated many years by Bloch, at least by thoughts concerning the technical aspects) the approach has been a matter of controversy. The first cases of Mikulicz were unsuccessful due to lack of knowledge concerning the physiology of the open thorax. After Sauerbruch's¹ contributions on methods dealing with this problem, Mikulicz was able to operate on the esophagus with one major problem at least partially solved. Sauerbruch² then continued working with the problem and made further contributions to esophageal surgery using an anterior approach gained by multiple costectomies.

Left and Right Thoracic Approach

The primary difference of opinion today is that of left versus right thoracic approach. The original Torek³ procedure was done with a right thoracic approach. Torek's case incidentally survived for 13 years. There are strong advocates and strong arguments for both protagonists. As is usually the case in divergent views, each approach can be utilized advantageously in its proper indication. Therefore, for lesions of the cardia and lower third of the esophagus the left thoracic approach is preferred. Lesions of this area can usually be handled through a single thoracic incision as pointed out by Garlock,⁴ Sweet,⁵ and others. Operative time, blood loss, and postoperative pain will usually be less with a single

incision. The left sided anatomical location of the lower esophagus appears to make this the obvious approach. For lesions of the middle and upper third of the esophagus the right thoracic approach is preferable particularly if the esophagogastrostomy has to be made above the level of the aortic arch. This approach of necessity requires some abdominal component. This may be a combined incision or consist of separate thoracic and abdominal components. The disadvantage of the longer incision, or incisions, is outweighed by the greater ease of exposure. Removing the esophagus from under the arch of the aorta as in the left approach can be most vexing at times. Lewis⁶ has pointed out the buttressing effect of the aorta and left subclavian artery when operating from the right pleural cavity. This can help prevent inadvertent opening of the opposite pleural space. Tumor may frequently involve the azygos vein and this is dealt with more easily and safely with the more direct approach from the right side. Anyone who has fashioned an esophagogastrostomy at or near the aortic arch will appreciate the greater facility with which this can be accomplished from the right side.

This combined approach can be made in various manners. MacManus⁷ used an upper left rectus incision for the abdominal component and entered the right thorax through the resected fifth, sixth, seventh or eighth rib. This operation was a two stage pro-

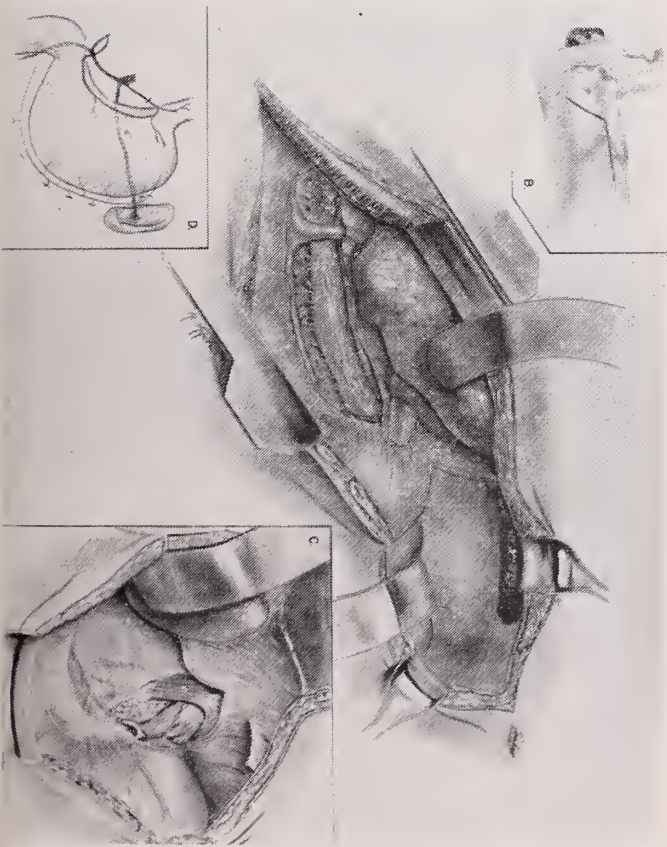


Figure 1: (a.) View of thoracic and abdominal contents as seen during surgery. (b) Incision. (c) View of abdominal aspect as seen at the time of surgery. (d) Blood supply of stomach illustrating points of ligation and supply remaining for the intrathoracic stomach.



Figure 2: View of operative field after completion of esophagogastrostomy.

cedure. Adhesions forming between the stage of gastric mobilization and final esophagectomy may seriously complicate placing the stomach in the thorax. Staging should be avoided since the need is now all but nonexistent.

Opening and closing two separate incisions probably prolongs the operative time. In attempting to circumvent this objectionable feature, the two team technique has been devised. This, however, is not the ideal solution. One team frequently interferes with the work of the other. The position of the patient on the operating table will usually not satisfy one of the two teams. The nurse may find it difficult serving two operators simultaneously.

Sanger⁸ advocated a sternum splitting incision with an upper abdominal component. This anterior approach may compromise exposure. The sternum divided both transversely and longitudinally may not heal properly.

Right Thoraco-Abdominal Incision

Some of the objectionable features of two incisions can be eliminated by a combined right thoraco-abdominal incision. This is not an original approach with us, but we believe its usefulness deserves further emphasis. Hollingsworth⁹ and Nakayama¹⁰ have discussed a somewhat similar approach. The incision is begun over the fourth or fifth rib or interspace and carried to the posterior axillary line (Figure 1). At this point the sternum or costal margin is divided.

ESOPHAGEAL LESIONS / Cope

The third or fourth costal cartilage may be divided, if necessary, for exposure of a very high lesion. In our experience, a better closure is obtained if the costal arch is divided rather than the sternum. Healing, likewise, may be more kindly with an intact sternum. In the same manner a rib resection thoracotomy will probably close more readily than an interspace incision. The incision is across the

The diaphragm is divided at the midline only to the extent needed to allow adequate opening of the wound with self retaining retractors. The ligamentous attachments of the left lobe of the liver are divided. This gives excellent exposure of the entire stomach, thus enabling prompt, safe mobilization. The left gastric artery can be handled with ease, and a splenectomy can be readily accomplished. We have not felt it necessary to create a new hiatus as advocated by Hollingsworth.⁹ It is true that crea-

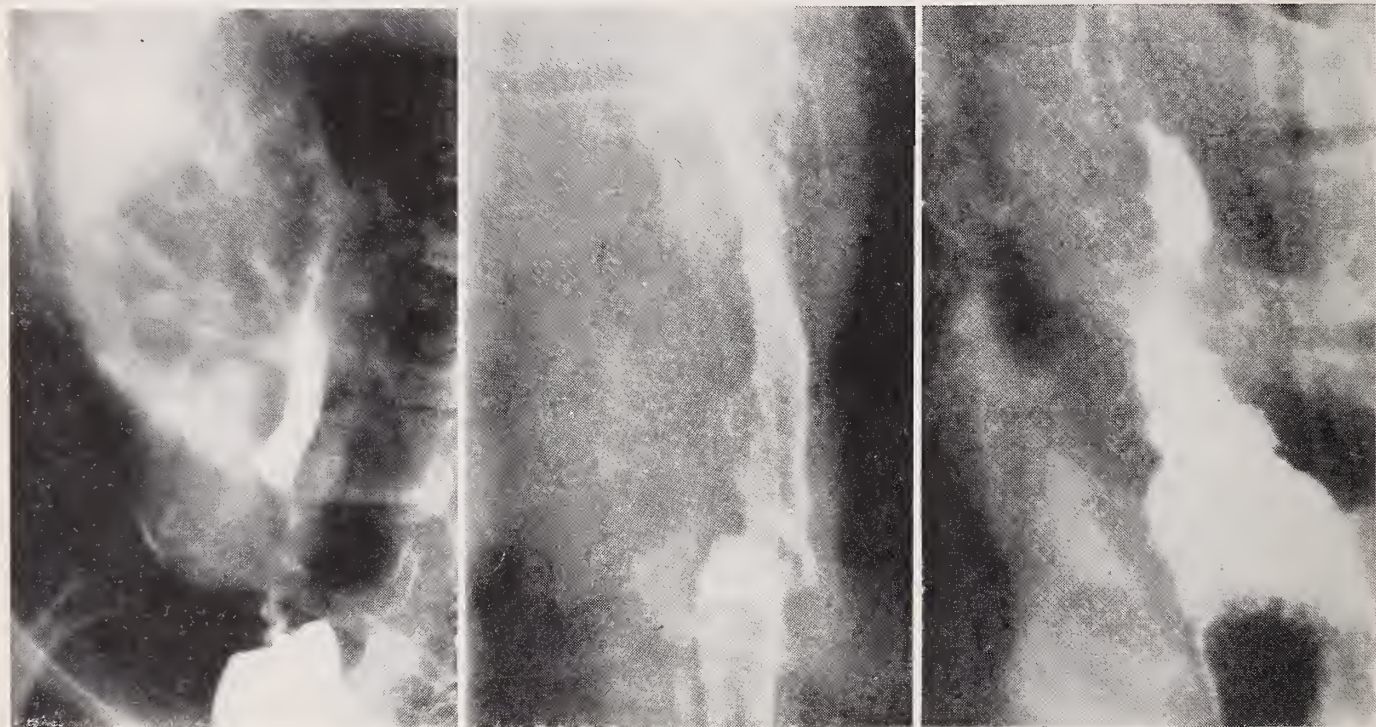


Figure 3: (Left) Preoperative esophagogram demonstrating carcinoma in upper third in 56 year old colored male. Figure 4: (Center) Two months postoperative esophagogram in same patient (Fig. 3) revealing good stomach function. Figure 5: (Right) Carcinoma of upper third of esophagus in a 64 year old white female.

costal arch into the abdomen and continued down the linea alba to the umbilicus. Because of the interlacing of fascial fibers at the linea alba a secure closure with good wound healing can be anticipated.

tion of a new hiatus will give a few more centimeters to the length of the newly fashioned gastric tube. In most instances, however, the stomach will readily reach into the cervical region. The normal



Figure 6: Postoperative x-ray after cervical anastomosis (Fig. 5) with good stomal function.



Figure 7: High lye stricture in a 26 year old white female. Dilatation no longer successful after 13 years.

hiatus is enlarged, if necessary, by dividing some fibers of the right crus. At this point care is required to avoid injury to the thoracic duct. Troublesome bleeding may occur from the inferior phrenic artery at this stage if one is not alert to its subcrural position. After placing the stomach in the thorax the hiatus is closed about the stomach with interrupted sutures (Figure 2). Hollingsworth has described obstruction occurring beneath the inferior vena cava as the stomach is compressed against the spine.



Figure 8: Postoperative result after esophageal resection (Fig. 6).

Radiologically one of our cases demonstrated considerable asymptomatic gastric retention, which subsided after several weeks. This patient did not have a pyloroplasty, so it is felt the emptying difficulties were due to the vagotomy effects, and not caval obstruction.

The use of pyloroplasty is individualized. Pyloric deformity and/or mild obstruction from preexisting disease is a strong indication for accompanying pyloroplasty. A complete vagotomy in the presence of pyloric abnormalities can cause distressing emptying difficulties. One of our cases with a high lye stricture had a Heinek-Mikulicz pyloroplasty with an uneventful postoperative course without gastric dilatation.

The anastomosis is made in the usual manner, high in the thorax, or in the cervical region as the situation dictates. A meticulous two layer anastomosis is made to avoid leakage, which is a most serious complication. The intrathoracic stomach is sutured

to the chest wall and mediastinum in such a manner as to relieve all tension on the anastomotic line. However, care is necessary in placing these sutures to avoid enclosing all layers of the stomach in the suture. We have had one death due to a suture of this type cutting through and causing a perforation of the stomach.

Wound closure is accomplished readily and surprisingly quickly. Reapproximation of the costal margin is facilitated by removal of a small portion of the costal cartilage. The arch is then sutured with heavy chronic catgut through the cartilage along with several pericostal sutures. The remainder of the wound closure is routine. One intercostal catheter is placed posteriorly for pleural drainage.

A gastric tube is not used routinely in the post operative period. If gastric dilatation develops, a Levin tube is inserted for as short a period as possible.

Oral liquids are begun on the second postoperative day. The intrapleural catheter can usually be removed in 24 hours, after which the patients may be ambulatory.

Conclusion

In conclusion we do not feel that an attitude of hopelessness is justified in esophageal lesions, including malignancies. True, much remains to be accomplished. Certainly, accomplishments will be realized in all phases of the problem from diagnosis to post-operative management. Some technical aspects of esophageal resection with particular emphasis on surgical approach have been emphasized which have proven valuable.

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DO YOU KNOW?

Of a total world population of nearly two and a half billion, over one and a half billion are said to suffer from one form of malnutrition or another.

ANESTHESIA FOR THE CARDIAC PATIENT

The further development of hypothermia, mechanical respirators, and heart lung machines gives promise of lowering the present mortality rate in the cardiac patient.

PAUL W. SEARLES, M.D., and DIGBY G. SEYMOUR, M.D.,
Chicago 5, Illinois

THE ACCEPTANCE by the medical profession of cardiac surgery is now established. In some centers cardiac surgery is more common than appendectomies. Relatively simple and comparatively safe operations can now be offered for most of the common congenital cardiac anomalies. In many of these cases a 100 per cent cure can be expected. The acquired diseases of valvular origins can be alleviated to a large degree. But the results are limited because of associated myocarditis. Coronary disease is beginning to yield to the newer techniques of revascularization and endarterectomies. Today most of these operations are done at the larger medical centers. However, there are many thousands of patients undergoing surgery each year in our smaller hospitals, patients whose cardiac status varies from normal to severe decompensation. It was not too many years ago that many of these patients were denied the benefit of life-giving surgical procedures because of their cardiac status or limitations of the anesthesia service. We are approaching but have not yet reached the day when this will not have to be true. The wide acceptance of cardiac surgery means that the anesthesiologist must assume his proper role in the selection of cases, and he must be familiar with the preoperative preparation, anesthetic management, and post operative care if the patient is to survive the operation.

Preparation of the Patient

The anesthetic management of the cardiac patient begins with the preparation. The history and physical examination must be thorough and accurate, for these two foundations of the medical evaluation acutely reflect the mortality that occurs. Patients with coronary disease and recent occlusions, patients and valvular defects who are not in failure tolerate major surgery quite well. However, those patients with coronary disease and recent occlusions, patients with dyspnea or with angina at rest, and those in

acute heart failure compose the group in which the majority of fatalities occur. The history is therefore the prime consideration and of more importance than the electrocardiogram. Postoperatively the most frequent causes of death in the cardiac patient are pneumonia, atelectasis, heart failure, cerebral accidents, and embolisms. In addition to the preoperative evaluation, the following must be accomplished: any anemia or hypovolemia should be corrected; digitalization should be complete; and bronchial dilators and oxygen supplied when necessary.

The basic principles of anesthesia for the patient who is to have cardiac surgery and for the cardiac patient who is to have an appendectomy are fundamentally the same. Indeed, there should be no difference from any other anesthetic carefully administered, except in the respect that there is no margin for error from the standpoint of physiology or from administration.

Cardiac Arrest

The primary concern is to avoid cardiac arrest. If we understand the various factors which cause cardiac arrest, then and then only will we be able to properly administer an anesthetic to a cardiac patient. One of the most important precipitating factors in cardiac arrest is hypoxia with or without hypercarbia, caused by bleeding and shock, obstruction to respiration, or depressed and ineffective respiration and circulation. A second factor is hypercarbia caused by soda lime exhaustion. A third factor is the reflexes which may be ineffectively blocked and become activated through light anesthesia or trauma to the viscera. Fourth, acute myocardial failure may occur either through shock, a coronary accident, or excessively deep anesthesia. Finally, there are certain mechanical factors, the most prominent of which is an obstruction of either the inflow or outflow of the blood passing through the heart. This obstruction may be either acute or gradual in onset.

To recapitulate, the primary concern is adequate oxygenation at all times with the meticulous avoidance of hypotension, carbon dioxide accumulation, hypertension and anesthetic overdose, and the avoidance of any factors likely to increase cardiac irritability or decrease cardiac output or the total circulating volume. Success of the operation depends upon the ability of the anesthetist to prevent or overcome these complications at the time of surgery. They particularly occur with myocardial depression or any decrease in peripheral resistance from any anesthetic agent in the deeper planes but rarely occur with light anesthesia. However, in the lighter planes they occur because of hypoxia resulting from coughing, straining, bucking, or spasms. The ideal anesthesia, therefore, is one that enables the patient to be maintained in a very light plane of anesthesia without suffering its consequences. At the present time no one agent or technique supplies this requirement. But the use of combinations of several agents given in small increments enables this to be done very readily.

Time does not permit a complete discussion of hypothermia in the cardiac patient. At present we are not using hypothermia for mitral commissurotomy or vascular surgery of the limbs. However, we are extensively employing the method in most of the other types of cardiac surgery and major vascular grafts to obtain the benefits of lowered metabolism, decreased bleeding, to lessen the likelihood of shock and to maintain a smooth anesthetic course in the bad risk patient.

The premedication usually consists of demerol and atropine with the addition of small doses of phenergan. Our use of these phenothiazine drugs are as follows: for premedication, potentiation, anti-stress, anti-emesis, reduction in narcotic or sedative demands, and to facilitate anesthetic techniques or stressful operations.

Technique and Choice of Anesthetic Agent

The choice of the anesthetic agent or technique employed depends upon the experience of the anesthesiologist. Pentothal may or may not be used depending upon the physical status of the patient. When it is used, 100 per cent oxygen is administered by mask for five minutes prior to induction. A 0.5 per cent solution of pentothal is administered by intravenous drip, given slowly so that any tendency to depression or hypotension can be immediately corrected. A hypnotic dose should rarely exceed 200 mgm. Respirations are assisted and a generous supply of oxygen given. If there is no fall in blood pressure, a gaseous agent is then introduced. When the reflexes are obtunded, endotracheal intubation is accomplished following the administration of succinylcholine. Two iron-clad rules should be followed.

No induction of anesthesia should be permitted until the suture nurse is fully gowned and her table set and at least one member of the surgical team is ready to operate. Secondly the patient should not be positioned for surgery until the anesthetist believes that the cardiovascular system has been stabilized from the initial induction anesthesia. The semi-closed technique with the absorber always in the circuit abolishes carbon dioxide retention. Respirations are controlled from the time of intubation until closure of the pleura. A combination of nitrous oxide and cyclopropane or nitrous oxide and ether is very satisfactory. Ether is not preferred because of its metabolic effects and tendency to produce secretions in light planes of anesthesia. Dr. Ivan Magill of London has said that the depth of anesthesia is too great when the anesthetist winks at the patient and the patient does not wink back. This analgesic state can be made possible by the use of a 50-50 mixture of nitrous oxide and oxygen supplemented with a continuous infusion of a 0.1 per cent solution of succinylcholine. The patient should be fully awake one to two minutes following the last skin suture.

The problem of fluid administration to a cardiac patient is a situation that must be faced. Fortunately, 10 cc per minute can be tolerated with no interference in cardiac reserve. In cases requiring transfusions the blood should be started early in the procedure. One gram of calcium gluconate is given with every two units to resupply ionized calcium. When severe citrate poisoning occurs with the rapid infusion of blood, calcium chloride is more effective because of its more rapid ionization. If possible, rapid transfusions should be avoided because of the high potassium and low calcium of the stored units, a combination which not only depresses the myocardium but also interferes with the respiratory center.

Treating Complications

Complications can occur in the most well controlled anesthetic management. They are best combatted on a physiological basis rather than by pharmacological means. However, several vaso pressors are recommended to temporarily maintain adequate circulation. Some of the useful ones are neo-synephrine, vasoxyl, ephedrine, and calcium chloride. A 0.2 per cent solution of procaine can be used to help prevent irregularities but will not preclude ventricular tachycardia or fibrillation. Tachycardia is best treated with vasoxyl (methoxamine) and oxygen. Quinide and digitalis are the two drugs to treat auricular fibrillation. Cedilanid is the drug of choice; the digitalization dose is 1.6 mgm. Ventricular fibrillation is the most serious of cardiac irregularities. Potassium chloride has been useful in some cases. Others prefer procaine followed by epinephrine.

ANESTHESIA FOR THE CARDIAC / Searles

Oxygen, artificial respiration, and manual cardiac compression are mandatory. Electrical countershock should be attempted if the other measures fail. Approximately 10 per cent of cardiac arrests are due to fibrillation. The other 90 per cent are true arrests or cardiac asystole. Immediate treatment is indicated. Oxygen is delivered by positive pressure, the heart is compressed, and vasopressors injected into the circulation promptly. Calcium chloride or neosynephrine are very effective. One molar sodium lactate is preferred by some groups. The diagnosis of cardiac arrest should be based on the absence of peripheral pulse. Electro cardiograms and cardiac monitors may be helpful in the differentiation of arrhythmias but they do not indicate the efficiency of the heart as a pump. Several investigators have reported the appearance of electrical patterns long after evidence of clinical death of the patient. Many patients are successfully resuscitated only to die in the postoperative period from cerebral edema.

Cerebral edema occurs almost simultaneously with cardiac arrest and must be vigorously treated. Adequate oxygenation with humidification must be supplied. The patient should be in a head up position. Good nursing care is essential. There must be an adequate airway at all times, a tracheostomy is sometimes necessary. Secretions must be removed diligently. Other useful measures are the performance of stellate blocks, and a dehydration regime

augmented by the use of 50 cc of serum albumin given intravenously every four to six hours. Other supportive measures may be the use of cardiac glycosides. Vasopressors must be used with caution. Hydrocortisone may be of some value. The nutrition of the patient must be maintained. It is also wise to have a psychometric evaluation of the patient to determine the amount of brain damage.

We have performed open heart surgery, using the bypass method of shunting the blood through mechanical pumps. This device demands a complement of individuals trained in the laboratory and on clinical patients for its successful employment. The anesthesiologist's role in this procedure is similar to our technique which we have already discussed. Carbon dioxide five per cent and ninety-five per cent oxygen is added to the bypass blood. The bypass blood must of necessity be freshly drawn. Most of our difficulties have not occurred during the surgical procedure but in the postoperative period. Some patients have failed to survive through cerebral damage or failure in making the proper readjustment in circulation.

In conclusion, further development of hypothermia, mechanical respirators, and heart lung machines of the future will do much to lower our present mortality of the cardiac patient. We have much to learn but our progress is visible and our future rewarding.

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NON-TB PULMONARY DISEASE SIMULATING PULMONARY TB

An analysis is made of 76 nontuberculous patients who were admitted to the wards of a veterans administration hospital with the presumed diagnosis of pulmonary tuberculosis

SOLOMON SCHWARTZ, M.D., and BOHDAN G. GIEL, M.D.,
Augusta, Georgia

THE DIAGNOSIS OF PULMONARY TUBERCULOSIS can be simple in advanced cases. At other times differential diagnosis may test the skill of the most knowledgeable physician.

Certain patients admitted as pulmonary tuberculosis are finally diagnosed as non-tuberculous; an analysis of the findings in these patients might furnish information of value to the general physician. Particular attention was paid to the reasons why non-tuberculous patients were considered as tuberculous and means of finally making the correct diagnosis.

Methods and Material

Of 1326 patients admitted for treatment to the tuberculosis admitting ward of the Veterans Administration Hospital, Augusta, Georgia, between January 1, 1953 and July 1, 1956, who remained long enough for work-up, 76 patients were non-tuberculous. The patients were all adult males with one exception. Of the 76 non-tuberculous cases, the one female was white and of the 75 males, 60 were white and 15 negro. Positive sputum smears on eight of these patients had been obtained before the patients were referred here; confirmation was not obtained in this hospital after extensive smear and culture. Tuberculosis was excluded as follows: Bacteriological examinations including six 24-hour concentrated sputum smears for acid-fast bacilli. Specimens were cultured for eight weeks. Patients without expectoration had three fasting gastric contents cultured for eight weeks. All previous x-rays were secured for comparison. Bronchoscopy and study of the bronchial aspirate for tubercle bacilli; tuberculin skin testing; lymph node and lung biopsy were also done in certain cases. None of these patients have as of this time shown any evidence of pulmonary tuberculosis on follow up.

Results

Table I tabulates these non-tuberculous patients as to their final pulmonary diagnosis with other important data.

1. *Pulmonary Fibrosis and Emphysema* comprise a large group of patients admitted as tuberculous. There were one white and two negro males. Five patients had hemoptysis. Bronchoscopy on these patients was negative. Bleeding could have come from small localized areas of bronchial disease which might have been demonstrated by extensive bronchographic studies. In one case who had cirrhosis of the liver it was believed that the bleeding came from esophageal varices. Four patients had negative tuberculin skin reactions to intermediate strength tuberculin (Purified Protein Derivative-P. P.D.). One case was not tested. Two patients had lung biopsies revealing non-specific fibrosis.

These patients were sent in as tuberculous, primarily because of roentgen findings. Review of the x-rays at this hospital, particularly comparison of previous x-rays demonstrated that the x-ray findings were those of long standing pulmonary emphysema with scattered or localized fibrosis. One of the reasons for confusion was that fibrosis was often most prominent in upper lobes. Emphysematous blebs and bullae, often extensive in upper lobes, were considered tuberculous cavities. Localized areas of bronchiectasis were confused with tuberculous infiltrate or cavitation.

These patients were on the average older compared to the average age of admission to the ward. Many patients had none, or minimal symptoms of lung disease; a routine x-ray, or the development of hemoptysis brought them to a physician. The diagnosis of pulmonary tuberculosis could have been immediately excluded in four patients by the negative intermediate strength tuberculin test. Noteworthy is the low ratio of negro to white patients.

2. *Unknown Lung Disease.* Fourteen patients were present in this group, of whom twelve were white males, one white female and one negro male. These patients were sent into the hospital primarily because of the roentgen findings of localized or generalized areas of fibrosis, nodulation or a mixture of

NON-TB PULMONARY / Schwartz

the two; two patients had pseudo-cavities on x-ray. During hospitalization x-rays showed no change, and previous x-rays obtained were identical with those during hospitalization. In addition to negative bacteriological examinations for tuberculosis, seven were negative to intermediate strength purified protein derivative. One case was not tested. Examinations were negative for fungi. In two cases, skin tests were positive for histoplasmosis and in one for blastomycosis, but without serological confirmation. Five had lung biopsies and two lymph node biopsies. Two node biopsies were negative; and of the five lung biopsies, two showed non-specific fibrosis and three non-specific granulomata. No fungi were found on culture or section of biopsy specimens. Four patients had negative bronchoscopies.

These cases are classified as unknown lung disease because of our lack of knowledge of the etiology of the roentgen findings. Pulmonary tuberculosis was eliminated to our satisfaction in fifty per cent of the cases by the findings of a negative inter-

mediate strength tuberculin test. One can theorize that the x-ray findings were the results of previous pulmonary infections due to viral, bacterial, or fungal causes but none of these suppositions could be confirmed by history, bacteriological, or pathological studies. One notes again the low proportion of negro patients as compared to the usual ratio of negro to white patients admitted to the Tuberculosis Service.

3. *No Lung Disease.* Fourteen patients were admitted who were finally diagnosed as falling into this group. Twelve were white and two, negro. All x-rays were on review interpreted as negative. Nine patients were admitted primarily for asthmatic and allergic disease or acute or chronic bronchitis. Three had strongly positive skin reactions to dust. Normal roentgenograms had been misinterpreted. Seven patients had negative intermediate tuberculin test; in four cases the tests were not done. Four patients had a very recent history of bleeding and in three of these patients bronchoscopy was done and no source of the bleeding could be found.

In two patients the finding of positive sputum smears for acid-fast bacilli caused admission to a

<i>Final Diagnosis</i>	<i>Number Patients</i>	<i>Mean Age</i>	<i>Tuberculin Intermediate</i>	<i>Hemoptysis</i>	<i>False Pos. Sputum</i>	<i>Biopsy</i>	<i>Cavity or Pseudo-Cavity</i>
Fibrosis and Emphysema	14	52.1	Positive 9 Negative 4 Not Done 1	6	2	1	3
Unknown Lung Disease	14	40.5	Positive 6 Negative 7 Not Done 1	2		7	2
No Lung Disease	14	42.4	Positive 3 Negative 7 Not Done 4	4	2		
Pneumonia	13	45.7	Positive 6 Negative 5 Not Done 2	3	2		3
Bronchiectasis	4	53.0	Positive 1 Negative 1 Not Done 2	1			
Lung Abscess	3	38.0	Positive 1 Negative 2	3	1		2
Lung Cancer	2	59.5	Negative 2	1		2	1
Silicosis*	2	51.5	Positive 1 Not Done 1				
Cystic Lung Disease	2	49.5	Positive 1 Not Done 1				2
Sarcoidosis	2	31.5	Negative 2		1	1	
Chronic Passive Congestion	2	46.5	Negative 1 Not Done 1	1			
Lung Infarction	1	62.0	Not Done 1	1			
Pulmonary Torulosis	1	26.0	Negative 1			1	
Calcification of Pleura	1	64.0	Not Done 1				
Non Specific Pleuritis	1	37.0	Positive 1	1		1	
*1 with Super- imposed Prostate Metastasis	76	45.8	Positive 29 Negative 32 Not Done 15	23		13	13

Table 1: Non tuberculous pulmonary cases simulating pulmonary tuberculosis

tuberculosis hospital. These findings of a single isolated positive smear was not confirmed on culture. Patients with bronchitis and asthma during their acute attacks sometimes have exaggeration of the normal bronchovascular markings which with apical pleural caps, minimal pleuritis, or minute calcium flecks caused a diagnosis of pulmonary tuberculosis, particularly if the patient had hemoptysis.

4. *Pneumonia*. There were thirteen cases of pneumonia, eight white and five negro. The proportion of white to negro in this group approximates the average ratio of white to negro admitted, and the mean age of 45.7 years is near the mean age of this group of patients. These patients were considered tuberculous because the lobar or segmental consolidation on their x-rays was thought to be due to tuberculosis. Pneumonia was often super-imposed on old chronic lung disease; several of these cases also had fibrosis, emphysema, or cysts. Three patients had pseudo-tuberculous cavities due to emphysematous bullae. Tuberculosis was also considered because three patients had hemoptysis.

In order to rule out carcinoma, four bronchoscopies were done which were negative. Confusion was also due to two false positive sputum smears for tuberculosis, not confirmed after hospitalization. None of these patients had a pneumococcus pneumonia; the organisms usually corresponded to the mixed flora present in the mouth and throat. One patient had a Friedlander's pneumonia and another patient had a nontuberculous chromogenic acid-fast bacillus. Five patients had negative intermediate strength tuberculin tests and in two cases skin testing was not done. Diagnosis of pneumonia was also confirmed by the infiltrate clearing under broad spectrum antibiotics sometimes leaving behind evidence of underlying chronic lung disease.

5. *Bronchiectasis*. There were four cases of bronchiectasis, all white males. The patients had long standing chronic lung disease confirmed by bronchography. One patient had hemoptysis. Confusion as to tuberculosis occurred because of areas of bronchiectatic honeycombing on x-ray resembling tuberculous cavities, with symptoms and signs of chronic lung disease. Review of previous films indicated that x-ray changes were of long standing often associated with fibrosis and emphysema. Tuberculin testing was negative in one case and not done in two cases.

6. *Lung Abscess*. Three cases, all in white males. Admission as tuberculous occurred because two of the patients had cavitation with infiltration; one had a lobar consolidation. All three had hemoptysis. The appearance of cavitation with hemoptysis led the referring physicians to a diagnosis of tuberculosis. Bronchoscopy was done on the case of lobar consolidation for possible carcinoma. It was negative.

Under treatment for lung abscess with broad spectrum antibiotics, cavitations, and infiltrations resolved. Another factor that caused confusion in one case was a positive smear for acid-fast bacilli. Tuberculosis was ruled out by cultures in this patient. Two cases had negative tuberculin tests.

7. *Lung Cancer*. The two cases were in older white males. Confusion with tuberculosis occurred because one of the cases had a cavity with infiltration, the other had infiltration and hemoptysis. Cancer was proven by thoracotomy. A negative tuberculin test was of great help in differential diagnosis in both cases.

8. *Silicosis*. Two cases. One white and one negro male. The lungs demonstrated bilateral massive fibrosis and nodulation which was interpreted as being tuberculous in origin. Both patients, on inquiry, had histories of long standing granite cutting. In one case, there was superimposed metastatic nodular involvement of the lungs and ribs due to carcinoma of the prostate. Tuberculin test was negative in one case and not done in the other case.

9. *Cystic Disease of the Lung*. Two cases, one white and one negro patient. The lungs revealed large emphysematous cysts, which being in the upper lobes, had been interpreted as tuberculous cavities. One patient in addition had generalized emphysema. Tuberculin test was positive in one case and not done in the other.

10. *Sarcoidosis*. Two cases, both young negro males, with negative tuberculin tests, intermediate strength. One had a false positive sputum smear. The x-rays in both cases showed bilateral hilar enlargements and bilateral pulmonary infiltrations. In one case, examination of a lung biopsy confirmed the diagnosis.

11. *Chronic Passive Congestion*. Two cases, one white and one negro. In one case, the tuberculin test was negative and in the other not done. Both patients had obvious heart disease, one hypertensive and the other arteriosclerotic. The x-rays showed bilateral increased pulmonary vascular markings, interpreted as tuberculous. Hemoptysis in one case caused further confusion.

12. *Lung Infarct*. A 62 year old white male with hemoptysis. Patient had arteriosclerotic heart disease and x-rays showed bilateral lower lobe infiltration interpreted as tuberculous. Patient had obvious thrombophlebitis of a leg.

13. *Pulmonary Torulosis*. A white male, 26, had a localized lower lobe four cm. nodule which was interpreted as a tuberculoma. Tuberculin test, however, was negative as was bronchoscopy. Lung biopsy revealed torula in the nodule on culture.

14. *Calcified Pleura*. A white male, 64, had a localized calcified pleural plaque. Patient was asymptomatic; tuberculin test was not done. There was no

NON-TB PULMONARY DISEASE/Schwartz

apparent reason to consider pulmonary tuberculosis in this patient.

15. *Pleurisy, non-specific.* One white male, age 37. There was a localized area in the roentgenogram which was interpreted originally as tuberculous infiltrate. However, this area was biopsied and was due to localized pleural thickening.

Discussion

The fact that errors in diagnosis were made not only by referring general practitioners but also occurred in patients referred from hospitals staffed by competent internists indicates that deficiencies in knowledge of certain aspects of chest diseases is widespread.

1. *Chest Roentgenogram.* There is no pathognomic chest x-ray of pulmonary tuberculosis. Cavitary lesions occur not only in pulmonary tuberculosis but in abscess of the lung, cavitating carcinoma, necrotic silicotic foci, fungus diseases, and other bacterial and neoplastic diseases. Particularly misleading may be the appearance of pseudo-cavities, as emphysematous bullae, congenital cysts, areas of resolving pneumonia and shadows produced by overlapping pulmonary vessels. Apical, oblique, and planigraphic studies may be required for clarification. Pulmonary fibrosis, infiltrations and nodulations occur in many diseases besides tuberculosis; nor is any combination of cavitation, nodulation, fibrosis or infiltration pathognomonic. Of great assistance is obtaining old x-rays for comparison study, and every effort should be made to obtain them. It is obvious that the presence of long standing, unchanging disease is of less urgency and affords more time for correct differential diagnosis.

2. *Sputum Examinations.* The diagnosis of pulmonary tuberculosis is primarily bacteriological. Therefore in a patient who has had thorough negative bacteriological studies a diagnosis of pulmonary tuberculosis is hazardous, particularly with pulmonary cavitation. In patients who have tuberculous cavities one ordinarily has no difficulty in demonstrating tubercle bacilli on smear if several concentrated specimens are examined, particularly if there is any amount of sputum expectorated. If there is no expectoration of sputum of sufficient amount, extractions of fasting gastric contents should be performed and these specimens cultured. Cultural confirmation of all positive smear specimens is also important. Nontuberculous acid-fast chromogenic bacilli occur frequently, and since these patients do not ordinarily respond to tuberculous chemotherapy, their identification is essential. When in doubt, guinea pig inoculation of cultural material is done. Since we consider bacteriological proof so important

for diagnosis and treatment, study of specimens should not be delegated to an inexperienced technician. In several cases the report of a false positive sputum smear complicated considerably the handling of patients. One should hesitate to accept the report of a single positive smear or even culture without confirming it by a second positive test.

3. *Therapeutic Test.* Diagnosing pulmonary tuberculosis solely by the therapeutic test is hazardous, particularly before collecting adequate samples of sputum for examination. If one starts treatment before attempting to make a diagnosis, one may never be certain just what one is treating. Even a short period of chemotherapy may inhibit the growth of the organisms and make them almost impossible to recover. Since treatment of tuberculosis requires a long period of chemotherapy, since it is costly and causes upheaval in family and personal life, it is essential to attempt to establish a diagnosis. In certain types of non pulmonary tuberculous infection, bacteriological confirmation is difficult; but in pulmonary tuberculosis if one examines sputa assiduously the diagnosis can almost be confirmed. If the patient has negative sputum smears and a stationary lesion one can wait before starting treatment until cultural confirmation is obtained.

4. *Tuberculin Test.* This test is one of the easiest, most useful, and most overlooked in the differential diagnosis of chest diseases. It is noteworthy that in 32 of our 76 cases it eliminated to our satisfaction the consideration of pulmonary tuberculosis. Furthermore, in 15 cases the test was not done so that actually there were 32 negative reports and 29 positive tests. With a decrease in the tuberculinization of the population, the test is becoming more useful and a surprisingly large number of patients even in the older age groups have never been infected. We use the intermediate tuberculin test, using purified protein derivative (P.P.D.). We have found this to be very satisfactory and reliable. In the terminal case of pulmonary tuberculosis one may at times have such depression of allergy that the tuberculin test is negative, but in these cases one has no difficulty demonstrating that the sputum is loaded with bacilli. We have found that the first strength tuberculin test gives a negative reaction in some patients with active pulmonary tuberculosis, and the second strength test may produce false positives. The intermediate test is therefore the one on which we rely and has produced no local or general adverse reactions of any consequence. In the 15 cases in which the test was not done, it should have been done and no clear reason for its omission is available in the records except that they were mostly in cases in the early years of this study when the importance of the test was not appreciated.

5. *History.* There are no pathognomonic symptoms in tuberculosis. The occurrence of hemoptysis often was assumed to be tuberculous and caused the emergency admission of the patient. In the older white male, hemoptysis is just as likely to be due to chronic lung disease such as pulmonary fibrosis, emphysema, bronchiectasis, or cancer. The combination hemoptysis and pulmonary roentgen changes seems to cause a reflex diagnosis of tuberculosis in many cases. In these cases the use of the intermediate tuberculin test and examination of several specimens for acid-fast bacilli would have given time for reflection.

6. *Physical Examination.* Physical examination likewise is non-specific. The occurrence of moist or dry rales occurs in many chest diseases. Sibilant and sonorous rales in a patient with bronchitis or asthma or moist rales of bronchiectasis, particularly when it occurred with hemoptysis, often caused the referral of the patients to the hospital as tuberculous.

7. *Bronchoscopy.* Bronchoscopy was particularly useful in the negative sense as excluding endobronchial tuberculosis or cancer. It should be done early in hemoptysis to find the source of bleeding. By the time the patient is admitted to a tuberculosis hospital, the bleeding has ceased and one can no longer find its source.

8. *Lung Biopsy.* This was done in 10 of our cases and found useful in excluding pulmonary tuberculosis. Two lung cancers were confirmed by this procedure. Culture of the biopsied material in addition to section is important, particularly in ruling out fungal diseases and pulmonary tuberculosis. One case of torulosis was found on lung biopsy. The diagnosis of pulmonary sarcoidosis was also confirmed by lung biopsy. Early lung biopsy is becoming more and more important for complete diagnosis. In seven cases of unknown lung disease where lung biopsy was done, no definite pathological diagnosis was established except non-specific fibrosis or granuloma. These changes were the results of some previous condition which had left non-specific residuals. A suggested lung biopsy was refused by several of our patients.

9. *Node Biopsy.* Node biopsy was done on three cases and in our series proved uninformative. In many other chest cases a node biopsy would be distinctly useful and important; particularly if mediastinal or peripheral adenopathy is noted.

10. *Fungus Cultures.* Fungus cultures were done in most of our cases but were nonproductive. Complement fixation and agglutination tests of blood serum for fungi were also noninformative. In other sections of the country where histoplasmosis, coccidiomycosis, and blastomycosis are more prevalent, these tests would prove of more value.

There are probably an equal number of patients who are admitted to a General Medical Service with a diagnosis of nontuberculous pulmonary disease who finally are diagnosed as having pulmonary tuberculosis. Essentially the same diagnostic points can be made about these patients; that is, that (a) the roentgenogram is basically nondiagnostic; (b) that thorough examination of the sputum for tubercle bacilli should be done on all chest cases; (c) that the tuberculin test is of great value in raising the possibility of pulmonary tuberculosis. One must always consider tuberculosis in this section of the country. In negro patients, the incidence is considerably above that of the white population. It should also be considered in the older white male where it is almost a geriatric disease because of its frequency.

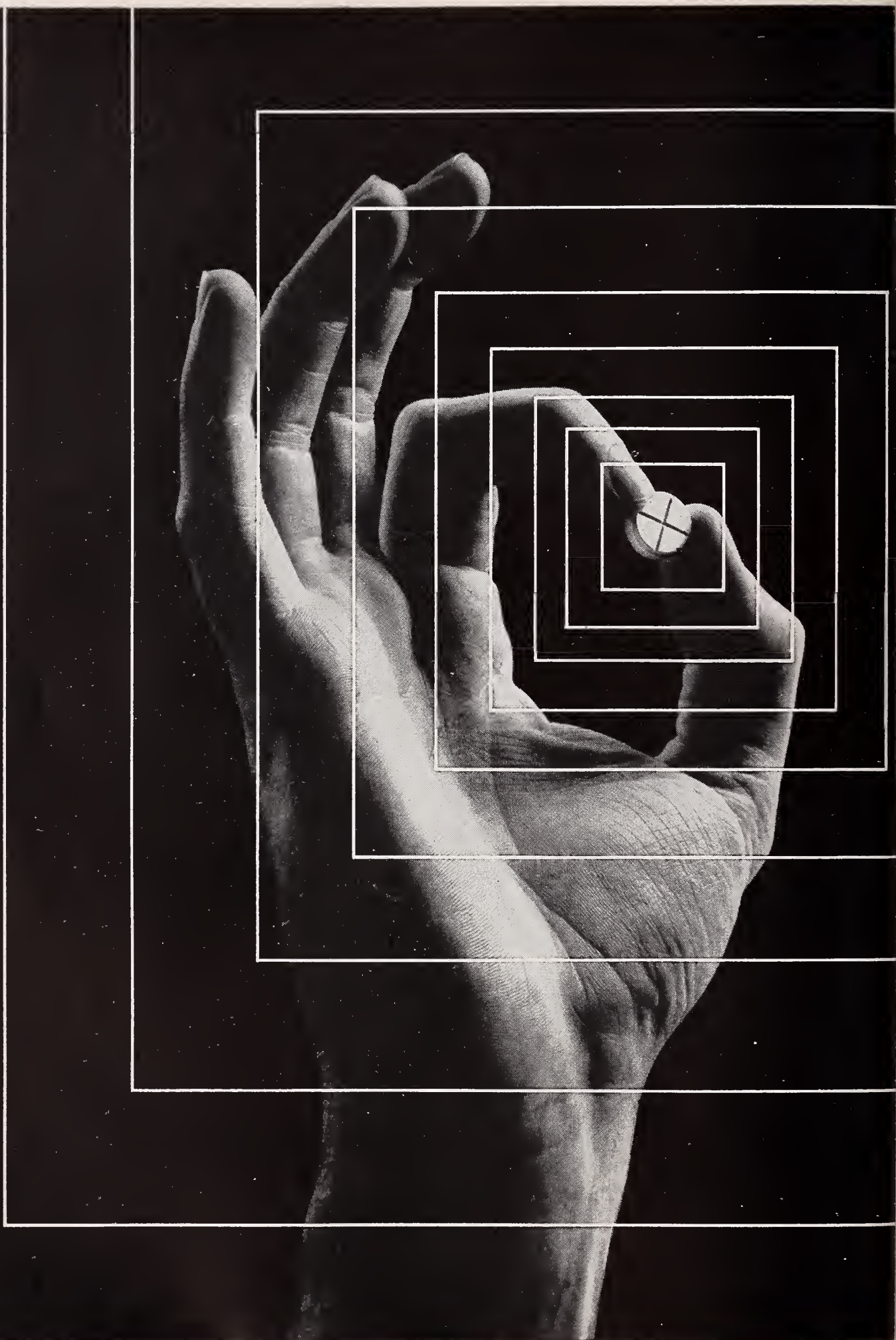
Finally, we would like to emphasize the frequent occurrence of concurrent chest diseases; that is, the occurrence of tuberculosis with lung abscess, with cancer, pneumonia, fibrosis, and emphysema, to mention just a few of the complicated and not uncommon situations that may arise. It is by keeping an open mind and not jumping to conclusions that one can finally reach correct diagnoses and prevent unpleasant surprises.

Summary and Conclusions

Of 1326 patients admitted to the Tuberculosis Service for treatment at this hospital between January 1, 1953 and July 1, 1956, 76 patients were found to have no pulmonary tuberculosis. Fourteen patients had pulmonary fibrosis and emphysema; fourteen had unknown lung disease; fourteen had no lung disease; thirteen had pneumonia; four bronchiectasis; three—lung abscess; two cases each of pulmonary cancer, silicosis, cystic disease, chronic passive congestion due to heart disease and sarcoid; and single cases of pulmonary infarct, torula, calcified pleura and non-specific pleuritis.

Referral of non tuberculous cases to a tuberculosis hospital was due to several factors. The primary cause was over-reading of the chest roentgenogram. We believe that there is no pathognomonic roentgen finding of tuberculosis which cannot be mimicked by some other type of chest disease. Cavities of cancer and abscess and pseudo-cavities of emphysematous bullae and lung cysts were mistakenly thought to be due to pulmonary tuberculosis. Obtaining old films for comparison often would prevent errors in diagnosis.

Failure to examine sputums thoroughly for tubercle bacilli often led to errors in diagnosis. Failure to obtain positive sputum on concentrated smears in patients with profuse expectoration and cavities makes tuberculosis most unlikely. Bronchoscopy and bronchographic studies are particularly useful in cases of hemoptysis and endobronchial disease to



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TABLETS: Each tablet contains 0.5 Gm. (7½ grains) of sulfamethoxypyridazine. Bottles of 24 and 100 tablets.

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1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.

NON-TB PULMONARY / Schwartz

determine the bronchial source of bleeding, and localize endobronchial disease for biopsy. Bronchoscopy shall be done during or immediately after the hemoptysis to pin-point the source of bleeding. Occurrence of hemoptysis with x-ray changes should not lead to a presumptive diagnosis of pulmonary tuberculosis as was done in some of our patients.

Pulmonary symptoms and signs are non-specific for pulmonary tuberculosis. The occupational history and residential history afford important clues toward

a fungal or pneumoconiotic etiology of the roentgen changes. The intermediate tuberculin test, a neglected and important test in lung diseases, is re-emphasized. In our experience the obtaining of such a negative test excludes with a high degree of accuracy the diagnosis of pulmonary tuberculosis.

Realization of the multiplicity and multiformity of many types of pulmonary diseases will prevent one from jumping to conclusions in the diagnosis of chest diseases and results in more accurate diagnosis with prompt, adequate, and economic treatment.

Forest Hills Division, VA Hospital

Notice to Former Grady House Staff

An organization is being formed which is to be composed of all former members of the House staff of Grady Memorial Hospital. Two years ago, letters were sent to all known former House Officers. However, we know many names were not included because of an incomplete mailing list. If you did not receive a notice or failed to reply for any reason please notify our office and let us know your name, address and when you were at Grady. Plans are now being made for our first Annual Meeting next fall.

Address: Grady Hospital Clinical Society
Office: C-610
80 Butler Street, S.E.
Atlanta, Georgia

DOCTORS HEAD WEST FOR AMA ANNUAL MEETING IN JUNE

BETWEEN 12,000 AND 15,000 physicians will journey westward in June in search of something far more valuable than gold. They'll be on a quest for the latest information on new medical techniques and discoveries at the American Medical Association's 107th Annual Meeting in San Francisco. The five days of June 23-27 will be filled with bright nuggets — including scientific exhibits, lectures, motion pictures, panel discussions, televised surgical procedures and commercial exhibits. Convenient center for the Scientific and Technical Exhibits, films, color TV and lectures will be the Civic Auditorium, the adjacent new Plaza Exhibit Hall and other surrounding buildings. Headquarters for the House of Delegates sessions will be the Sheraton-Palace Hotel.

Plans for an outstanding scientific lecture program are being completed by the Council on Scientific Assembly. Opening the general scientific program Monday afternoon, June 23, will be a symposium on the care of the severely injured patient. Tuesday morning's general meeting will feature another symposium on hazards associated with therapeutic agents. Formal scientific section meetings will run from Tuesday afternoon through Friday morning.

Special panel discussions and demonstrations are being planned throughout the meeting, including: perinatal problems; methods of resuscitation of in-

fants; nutrition; physical examination of physicians, using electrocardiograms and chest x-rays; fresh tissue pathology, and treatment of fractures. The Section on Miscellaneous Topics also is planning sessions on allergy, prevention of traffic accidents, prevention of injury in sports, and medical professional liability. Other features will be a color television program of live operations and demonstrations from San Francisco Hospital and a varied motion picture program.

Two high school winners of AMA scientific awards at the National Science Fair again will display their prize exhibits. In addition, the top winners of the intern-resident and medical student exhibit classifications at the Student AMA convention this spring will be invited for the first time to exhibit at an AMA meeting.

Registration officially opens at the new Plaza Exhibit Hall Monday, June 23, at 8:30 a.m. and closes Friday noon. Advance registrations will be accepted Sunday, June 22, from 12 noon to 4:00 p.m. The Scientific and Technical Exhibits will be open to AMA physician-members *only* on Tuesday and Wednesday mornings.

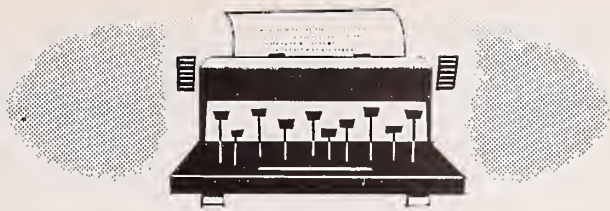
Plan now to attend this worthwhile medical meeting. Watch for further details in THE JOURNAL OF THE AMA.

THE EXERCISE TO CRITICAL JUDGEMENT

THE ART OF medical practice consists chiefly in a judgement regarding the appropriateness of concepts in etiology, diagnosis, treatment, and prognosis. How can there be good medical judgment when a person is incapable of independent judgement in other spheres? We are in this respect at a particular disadvantage, because in our democratic society there are tremendous pressures toward uncritical conformity. The levelling tendency is always downward, for egalitarianism denotes the lowest common denominator. Too few dare the rigors of independent thought — whatever the subject — and many who so venture have to pay a high price for their courage. The result is that our average young physician is not an interesting person. He is self-complacent, comfort-loving, and unenterprising; and this smug attitude is sometimes coupled with colossal ignorance as well as lack of curiosity about anything not pertaining to the immediate and only goal, i.e., the successful passing of the examination of the American Board of his specialty.

His understanding of human nature is often superficial; he does not realize that “normal” covers a wide range in sexual, social, and moral spheres. This has become apparent to me in connection with the pursuit of my special interest in psychocutaneous medicine. There is either enthusiastic acceptance or emotionally-tinged rejection of the subject, but attempts at critical evaluation are scarce.

The paucity of knowledge outside the immediate field of interest is exemplified in the hesitancy on the part of some young physicians to express an opinion on a question involving general medicine in round table discussions with his colleagues in other specialties. Particularly evident is a disinclination to independent thought in evaluating cases. Worse still is the increasing disregard or even disrespect for clinical work and clinical investigation. Naturally, we are all fully aware that progress in clinical medicine has become inseparable from laboratory work; but the belief seems widespread that research, to have any real value, dignity, or validity, must be done in biochemistry, biophysics, histochemistry or on laboratory animals — in other words on anything but the patient! Could it be that this shying away from working with the fellow human being is an indication of basic insecurity on the part of the investigator, of



editorials

his subconscious realization that with his scant capability for judgment he had better sit behind the Erlenmeyer flask whose contents have no personality and fewer variables?

Whatever the reason, the trend is dangerous; for if it continues, the physician may find himself one day merely an artisan who utilizes the facts and pseudofacts handed down to him from the laboratory as his tools, to be adapted, with scant discrimination, to the needs of his patient.

*Maximilian E. Obermayer, M.D.,
3875 Wilshire Blvd.*

SHOCK

SHOCK MAY BE divided into primary or secondary shock, a division which is not always valid. Frequently it may be a mixture of both. Lately, the military has elected to add a third classification which they call cardiogenic shock. This latter state is one peculiar to such things as cardiac tamponade or a massive pulmonary embolus. One observes in a traumatized patient the following factors that exist in a state of shock:

1. pallor
2. cold, clammy skin
3. apathy
4. a rapid, feeble pulse
5. low blood pressure

The patient in shock is in a non-stable state, and vasoconstriction may fail either gradually or suddenly as a result of such slight factors as putting a recumbent patient upright. As shock progresses the patient becomes steadily worse, because there is an increase in the adverse effects of anoxia and because acidosis develops progressively and with increasing rapidity. If the problem is not corrected, the ultimate outcome is a fatality.

In any elective or predictable situation, certain preventive measures are of utmost importance whenever shock may possibly occur. One may allay a

Excerpt from an address to The Society of Investigative Dermatology, June 1, 1957 by Dr. Maximilian E. Obermayer of Los Angeles 5, California. Reprinted from the Journal of Investigative Dermatology, Vol. 29, Oct. 1957, No. 4.

patient's apprehension by satisfactory discussion of a contemplated operative procedure, by allowing him a suitable interval to accommodate himself to his surroundings, and by the judicious use of drugs commonly available for narcosis and sedation. When possible, any state of dehydration or existing anemia should be corrected prior to surgery. A patient should not be exposed to excessive chilling, or for that matter, excessive heat. One must of necessity avail himself of adequate anesthesia, be extremely gentle in the handling of viscera and body tissues at the time of operation, and take pains to see that hemostasis is properly effected. Every effort should be made to correct deficits due to blood and fluid loss and to replace important electrolytes.

In hemorrhage it is obvious that intravascular fluid is completely lost from the body. In traumatic shock, however, fluid passes from the intravascular space to the extravascular compartment in general, and especially at the site of trauma. Therefore, in both shock due to hemorrhage and in traumatic shock, there is a decreased intravascular volume which results despite the differences in fate of the fluids lost to the body economy. In general, there are two periods of activity that have been described following hemorrhage. The first is characterized by a progressive vasoconstriction of peripheral blood vessels starting with the skin, and therefore producing pallor. As hemorrhage continues other non-vital tissues are affected resulting in vasoconstriction with a reduction in the total capillary blood supply. Progressively this occurs in skin, striated muscle, gastrointestinal tract, kidney, and liver. During this phase of vasoconstriction, the vascular tree is adapting itself to the progressively decreasing circulating fluid volume. Finally, even larger arteries and veins may constrict themselves to almost one half their normal diameter. During this phase of body response to hemorrhage there is evidence of a preponderance of humoral material VEM (vaso-excitor material). Also, during this period of vasoconstriction it must be noted that the vascular tree is compensating for the blood and fluid lost, and since no discrepancy exists between the circulating blood mass and the containing system the blood pressure remains unchanged.

Therefore, clinically, blood pressure may be normal and not at all reflect the true physiological change that exists in the patient. As hemorrhage continues it has been shown that the kidney (a very vital organ in the shock problem) is adversely affected. Early in hemorrhage renal blood flow is normal. As the hemorrhage continues, renal blood flow diminishes and urine formation decreases. After

further blood loss, urine formation and plasma clearances through the kidney stop. Unfortunately, it has been noted that this latter situation can take place in the kidney when blood pressures are measured within normal limits. Interestingly enough, too, it must be remembered that even when the kidney has been deprived of all except the bare minimum of blood supply, the liver remains well vascularized.

Secondly, a phase of the reaction to hemorrhage called vascular decompensation takes place. At some point in the progression of shock, the blood vessels reach maximal vasoconstriction, and despite further bleeding or stimulus no further contraction of the vascular space can take place. When this condition exists, all circulating blood is diverted to the heart, brain, and other vital structures which are necessary to support life. Renal blood flow has stopped, urine formation has ceased, and the liver begins to become anoxic. The failure to correct shock at this stage results in an irreversible state with a fatal outcome.

Pain adds to the body burden in shock, and when it exists it must be controlled. Animal and laboratory studies demonstrate that morphine decreases the respiratory rate and volume and with it there is an associated decrease in oxygen consumption with an accompanying lower blood pressure. Many sedatives and anesthetics have a similar effect when administered to the patient in whom shock has developed.

One must not overlook the role of bacterial infection when considering the patient who has developed shock. It has been demonstrated that bacteria can cause shock. Not only that, but bacteria can markedly influence progression of shock once trauma or hemorrhage has initiated the process.

Certain metabolic aspects of the shock problem are of importance. Trauma produces a release of epinephrine through stimulation of the adrenal medulla and this in turn gives rise to certain sympathomimetic effects; a rise in general blood pressure occurs with an increase in force and output of the heart. Hyperglycemia results from the mobilization of carbohydrate from labile stores in the liver, a method of insuring an adequate supply of fuel. Increased oxygen carrying capacity of blood occurs due to the discharge of red blood cells from the spleen. Bronchial dilation and increased rate and depth of respiration also occur. Studies demonstrate a shortened coagulation time of blood. Simultaneously, epinephrine stimulates the anterior pituitary to release increased amounts of adrenocorticotrophic hormone (ACTH) and also very likely, thyroid stimulating hormone (TSH) into the bloodstream. These two hormones in turn effect the increased activity of the adrenal cortex and thyroid and the total

Continued on Page 128

Heart Failure and Tuberculosis

HUI-CHING Y. LIN, M.D.

HEART FAILURE AND tuberculosis are more frequently associated than is generally realized. The heart and lungs are joined functionally in the circulation and the oxidation of the blood. Tuberculosis involving any part of either or both organs to an extent enough to embarrass their function can cause heart failure. The following brief discussion encompasses only the related problems of heart failure and tuberculosis as seen in acute tuberculous pericarditis and pulmonary heart disease of tuberculous origin.

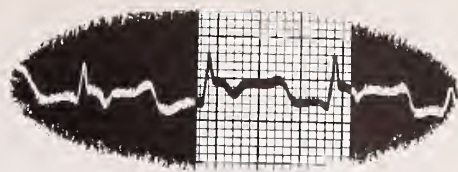
Acute tuberculous pericarditis is not a rare condition. It is usually a secondary disease; several types are known: fibrinous, sero-fibrinous, and fluid (effusion), the amount of which may vary widely. When it occurs as a primary disease, as reported, or when it associates with small or no effusion, the diagnosis is difficult and sometimes missed. The consistent symptoms are an unexplained fever and progressive cardiac insufficiency in a non-cardiac patient. By careful investigation employing available special procedures including, if necessary, pericardium biopsy, clinical diagnosis is possible. When the effusion is rapid and large it can cause cardiac tamponade; paracentesis of the pericardium is then imperative before the heart fails. The identification of *M. tuberculosis* in the fluid obtained provides the diagnosis.

When the diagnosis is established or suspected, chemotherapy should be instituted immediately without which the mortality is 85 per cent. The basic regimen consists of isoniazid four to five milligrams per kilogram body weight and PAS 10 to 12 grams daily. Streptomycin, one gram daily, may be added during the acute period. Improvement is usually prompt, and steady absorption of the fluid may occur without further aspiration. The average patient becomes asymptomatic within three months, and the cardiac silhouette becomes normal in about six months. The electrocardiographic changes, if not at this time, will usually be reverted at the end of a

year. But isoniazid and PAS should be continued up to 18 months or two years. The patient should be on strict bed rest for three months and modified bed rest for another three months; then, a schedule of gradually increasing activity is initiated, working up to a normal level in 18 months to two years.

Pulmonary heart disease frequently develops in patients with prolonged chronic pulmonary tuberculosis and extensively destroyed lungs or in cured cases after the proliferative healing processes have taken place, leaving behind diffuse fibrosis and/or healed cavitation. Due to the cumulative effect of respiratory functional derangement, as caused by extensive pulmonary parenchymal destruction associated with vascular damage, the effective alveolar ventilation is diminished; hence arterial oxygen saturation is reduced. The constrictive effect of the anoxia further reduces the pulmonary vascular bed. This sequence of events sets up a vicious cycle leading to cor pulmonale. When this condition becomes persistent, heart failure supervenes. With the present effective anti-microbial therapy and improved surgical techniques, an increasing number of formerly would-be fatal tuberculous cases are being returned to the general population with various degrees of pulmonary insufficiency to become potential victims of cor pulmonale. Heart failure occurs as a result of physical over-activity, gross overweight, or a respiratory infection wherein there is a rise in oxygen consumption beyond the ability of the body to compensate.

The clinical manifestations are well known. Immediate treatment is required lest coma or death ensue. First attention should be directed toward improving alveolar ventilation with liberal use of nebulized bronchial dilators of epinephrine derivatives supplemented with intravenous injection of aminophylline. Broad spectrum antibiotics should be used as a prophylactic or as a therapeutic measure in controlling the infection. Expectorants for elimina-



heart page

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

HEART PAGE / Continued

tion of accumulated bronchial secretion in the airway should be helpful. Digitalization, mercurial diuretics, and sodium restriction to improve the cardiac function and to reduce hypervolemia are needed if edema is present. Oxygen should be used cautiously and only in low concentration at proper intervals. Narcotics, especially morphine, and barbiturates are contraindicated because of their depressing effect on respiration. If sedation is needed, demerol may be given in doses of not more than 40 mg. In comatose

patients, trachial bronchial suction and artificial respiration should be employed as indicated.

In conclusion, acute tuberculous pericarditis and pulmonary heart disease of tuberculous origin, although occurring in different circumstances, are related through the association of tuberculosis with heart failure; both may present medical emergencies requiring prompt therapeutic action. The former is treated with specific anti-tuberculosis drugs while the latter is controlled with general measures as used for all cor pulmonale patients.

EDITORIALS / Continued

eosinophile count drops. The vital role of the adrenal cortical steroids in general, and in shock particularly, is preserving normal volumes, distribution and electrolyte composition of body fluids.

Shock, therefore, results in a true or a relatively diminished blood volume eventually manifested by a fall in arterial blood pressure plus certain other signs and symptoms depending upon the type of body response to adverse stimuli. More commonly, these stimuli exist in the form of wounding, burns, crush injuries, hemorrhage, and other forms of trauma. It is well to be aware also that the degree of severity of trauma is extremely important in the

evaluation of the patient in shock. As a rough measurement one must appreciate that up to 15 per cent of the blood volume can be depleted without physical or symptomatic change. When up to 45 per cent of blood is lost the state of severe shock exists. Between 15 per cent and 45 per cent, as blood loss progresses, varying changes are noted and they are even further varied by the type of trauma that instituted the blood loss shock originally. Also in shock there is an alteration of gastrointestinal activity, salivary gland function, pancreatic secretion, etc., to say nothing of the function of the more vital organs. Lastly, very rarely do nausea and vomiting, sweating or coma exist, and when they do, some other associated problem should be looked for and interpreted.

Medical Association Dues-1958

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1958 A.M.A. Dues	_____	\$25.00
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NOTICE OF CORRECTION

In a typographical error in the January 1958 *Journal of the Medical Association of Georgia*, AMA dues was incorrectly listed at \$40.00, which should have read \$25.00. Please make check for correct amount payable to your County Society Secretary and remit directly to him immediately.

Gray, A. Richard; John M. Howard; William H. Harrison Jr., and Cecil M. Couves, Emory Hospital, Emory University, Georgia, "Injuries of the Trachea," *Arch. Surg.* 76:138-142 (Jan) 1958.

Nine patients with traumatic injuries of the trachea are reviewed. Two were injured by blunt trauma, two by bullets, and five by knives.

Two features, subcutaneous emphysema and respiratory distress, were the two manifestations of closed, stab or puncture wounds of the trachea.

Subcutaneous emphysema resulting from tracheal injuries had three characteristics: (1) began in the neck, (2) sometimes spread very rapidly, (3) occasionally was massive.

Diagnosis was made difficult by the occasional delayed leakage of air from the trachea and associated thoracic injuries producing subcutaneous emphysema.

Treatment consisted primarily of an adequate airway by inserting a tracheotomy tube, repeated endotracheal aspirations and systematic antibiotics.

Four of the knife wounds had the tracheotomy inserted through the laceration. The bullet wounds were sutured and a separate incision was made for the tracheotomy.

Five patients had associated thoracic injuries and four required closed tube drainage of the pleural cavity.

Two deaths were the two blunt injuries. One was kicked in the neck. Immediate tracheotomy resulted in improvement but he died on the third day of an unexpected massive pneumothorax and syphilitic aortitis. The second also had a crushed chest and died on the third day.

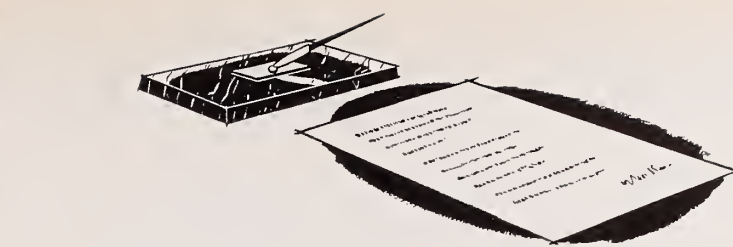
The living patients have been followed two to seven years and have not developed clinical evidence of stenosis.

Wammock, Hoke and C. M. Rhode, Augusta, Georgia, "Pitfalls in the Management of Cancer of the Head and Neck (Oral Cavity)," *Am. Surgeon* 23:1122-28 (Dec) 1957.

Epidermoid lesions of the tongue, lip, floor of mouth, gingival margin, and buccal mucosa are discovered as they present similar and comparable diagnostic and therapeutic problems for those lesions arising in the oral cavity. These lesions are usually confined above the clavicle in about 80 per cent of the total number of cases. For all intent and purposes, they are accessible for diagnosis and treatment. The end results should be much better, but unfortunately, too many cases are lost because of several factors. We have discussed some of the factors involved in the management of this type of cancer. These are described as pitfalls in the management of lesions arising in the oral cavity. These pitfalls are:

1. Biological potential of the tumor
2. Mode of spread
3. Delay in diagnosis
4. Improper or inadequate therapy

Failure to fully appreciate the biological potential of the cancerous process and the mode of dissemination gives one a false sense of security. One can usually predict the pathway of lymphatic spread for lesions localized to one side of the midline, as they us-



abstracts by georgia authors

ually spread to the lymphatic structures on the same side, but may spread to the opposite side. Another difficulty with the dissemination of the process by the lymphatic system is to clinically determine when a lymph node, whether it be palpable or not palpable, contains cancer. Other considerations include the spread to contiguous structures, particularly the mandible. The lymphatics of the tongue, floor of mouth, gingival margin, and buccal mucosa pass through the mandible. The mental foramen becomes quite superficial and vulnerable for invasion. Furthermore, there may be invasion of the buccal node and when this occurs it rapidly attached itself to the mandible and invasion takes place very readily.

Based upon the local extent of the disease and its potential to spread and invade bone poses a problem from the standpoint of the selection of therapy. One must give full consideration to the possibility of performing an incontinuity procedure, which includes a neck dissection and half of the mandible on the involved side together with the primary tumor. This allows for more radical excision of the local tumor and eradication of the intervening tissue from the local sites to the area of possible lymphatic spread.

White, Paul C., Jr., Pimental, David, and Garcia, Felix C., "Distribution and Prevalence of Human Schistosomiasis in Puerto Rico in 1953." *American Journal of Tropical Medicine and Hygiene*, 6(4):715-726 (July) 1957.

In 1955 over 10,000 individual fecal examinations were made from Puerto Rican school children in order to ascertain the incidence and distribution of *Schistosoma mansoni* in the population. Other helminths were also recorded. The average percentage rates of infection were as follows: *Schistosoma mansoni*, 10.0; hookworm, (*Necator* and *Ancylostoma*), 17.1; *Trichuris trichiura*, 92.6; *Ascaris lumbricoides*, 20.3; and *Strongyloides stercoralis*, 0.4. The incidence of *S. mansoni* in boys and girls was 12.5 and 8.1 percent respectively.

A study was undertaken to relate the abundance of the snail vector (*Aus-*

tralis labialis), the infection rate in the snails, and the incidence of infection in the human population. It was found that, in general, the abundance of snail vector was directly related to the incidence of human infection. There was little or no relationship between human infection rates and infection rates in the snail vector at a given time in a particular locality.

Martin, John D., Jr., and Charles P. Adams, Department of Surgery, Emory University School of Medicine, Emory University, Georgia, "Multiple Nonpenetrating Wounds of the Abdomen," *South. M. J.* 51:62-66 (Jan) 1958.

Multiple injuries are a great concern in any location and are more so when the abdominal cavity is involved. The problem, primarily, is early recognition and institution of adequate treatment to lessen the extremely high morbidity and mortality that accompanies them. Following a penetrating wound evidence of peritoneal irritation is usually obvious. Nonpenetrating wounds, however, are frequently not easy to determine. Occasionally, they are questionable and more often they are difficult to diagnose depending on the organs involved. When a fixed organ has been injured there is usually blood loss. On the other hand, if the intestines have been perforated, bacterial or chemical peritonitis occurs in addition to possible blood loss. More multiple intra-abdominal injuries can be expected with the increasing number of accidents. The manifestations of intra-abdominal trauma may be minimal initially, and frequently observation is in order to avoid overlooking them. In the presence of continuing blood loss, it is most essential that exploration be done at the earliest time. Treatment of intra-abdominal injury should receive precedence over injuries in other parts of the body. Injuries to the colon and duodenum are the most severe of the nonpenetrating variety. Electrolyte problems are tremendous in the multiple lesions involving the upper abdomen. Jejunostomy feeding plays an important role in the correction of nutritional and electrolyte deficiencies in these patients.

It's Annual Session Time Again...

APPLICATION FOR HOTEL ACCOMMODATIONS
Medical Association of Georgia 1958 Annual Session
April 27, 28, 29 and 30, 1958, Macon

A Housing Bureau has been established for your convenience in making your hotel reservations in Macon for the 1958 ANNUAL SESSION of the Medical Association of Georgia. Comparable room rates are listed. Use the Reservation Blank below. Please specify your first, second and third choice hotel. All requests for reservations should give: (1) anticipated date and hour of arrival; (2) date and approximate hour of departure; and (3) names and addresses of all persons who will occupy the accommodations. ALL RESERVATIONS MUST BE CLEARED THROUGH THE HOUSING BUREAU. Since all requests for rooms will be handled in *chronological* order, you should mail your application as early as possible. All reservations will be confirmed.

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	Single	Double Bed	Twin Beds
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AMBASSADOR MOTEL	\$4.50-\$6.00	\$6.50-\$8.00	\$7.50-\$9.00
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If the hotels of your choice are unable to accept your reservation the Housing Bureau will make as good a reservation as possible elsewhere.



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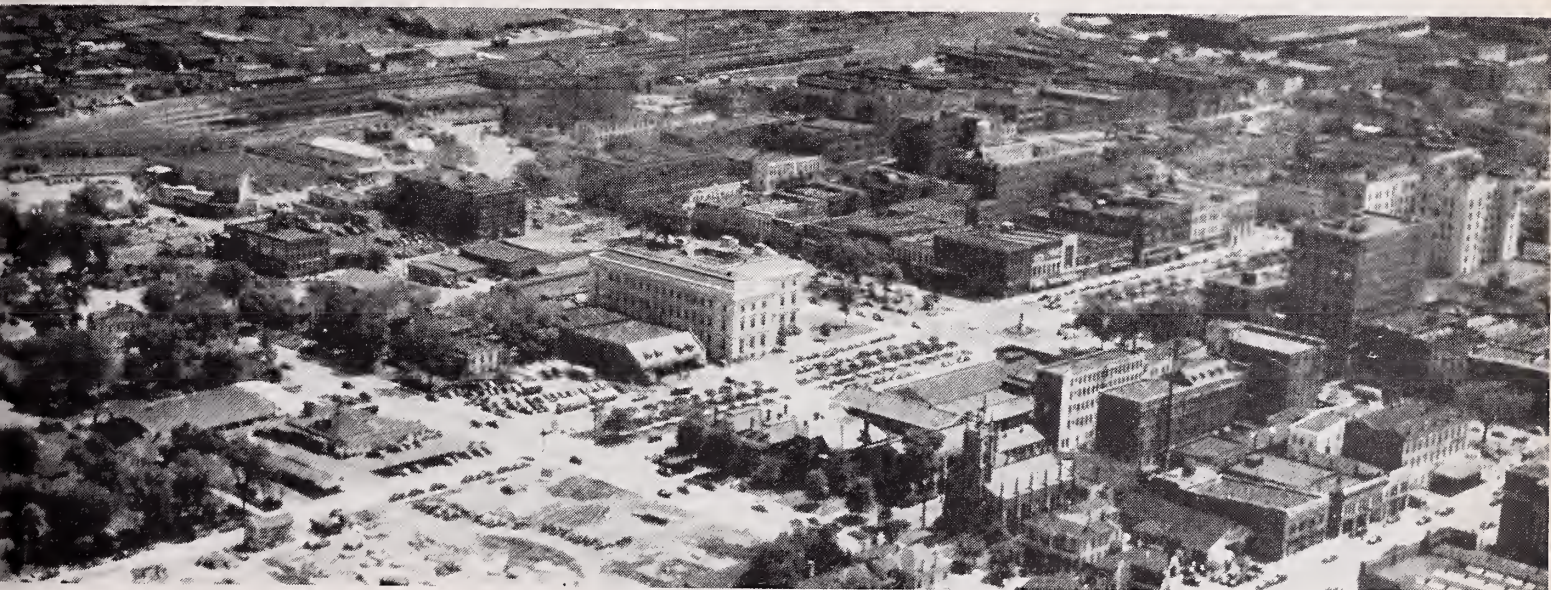
Washington Memorial Library



New Macon Hospital

MACON

104th Annual Session, April 27-30, 1958



Aerial view of Macon

Ceremonial Mound, National Monument



Wesleyan Conservatory



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Scientific Exhibits and Meeting Rooms

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By Ancillary Personnel

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David Henry Poer, Atlanta, *Chairman*
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 Alternate—J. W. Chambers, LaGrange (1959)
 Delegate—Eustace A. Allen, Atlanta (1959)
 Alternate—Wm. R. Dancy, Savannah (1958)
 Delegate—Spencer Kirkland, Atlanta (1958)
 Alternate—Henry H. Tift, Macon (1958)

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 Lester Harbin, Rome
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 Herbert D. Tyler, Thomasville
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Walter Brown, Savannah
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Fred Simonton, Chickamauga
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Howard C. Derrick, Jr., Lafayette
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Frank Eldridge, Valdosta
A. B. Conger, Columbus

Industrial Health

Robert M. Harbin, Rome, *Chairman*
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Allen M. Collinsworth, Atlanta
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Crawford W. Long Memorial

Lester Rumble, Jr., Atlanta, *Chairman*
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David R. Thomas, Jr., Augusta, *Chairman*
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6th—Herbert M. Olrick, Macon
7th—E. S. Marks, Marietta
8th—W. L. Pomeroy, Waycross
9th—W. Perrin Nicolson, III, Gainesville
10th—David R. Thomas, Jr., Augusta

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Hugh J. Bickerstaff, Columbus
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Thomas C. McPherson, Atlanta
Helen W. Bellhouse, Atlanta
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Medical Defense

Charles S. Jones, Atlanta, *Chairman*
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Medical Education

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Lee Howard, Jr., Savannah (1960)

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Lee Howard, Sr., Savannah

Public Health

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Lester Rumble, Jr., Atlanta
Charles M. Mulherin, Augusta
Charles S. Jones, Atlanta
Thomas L. Ross, Jr., Macon
Rives Chalmers, Atlanta
W. F. Reavis, Waycross
John P. Heard, Decatur
J. Lee Walker, Clarkesville
Ted F. Leigh, Emory University
Hartwell Joiner, Gainesville
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J. Lee Walker, Clarkesville, *Chairman*
1st—Charles T. Brown, Guyton
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3rd—M. F. Arnold, Hawkinsville
4th—T. A. Sappington, Thomaston
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Scientific Exhibit Awards

Ted F. Leigh, Emory University, *Chairman*
Hoke Wammock, Augusta (1959)
Charles H. Richardson, Jr., Macon (1958)

Mental Health

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John P. Tucker, Moultrie

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(Tentative—to be confirmed)

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J. W. Palmer, Ailey
M. D. Pittard, Toccoa
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Reference Committee No. 3

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Leo Smith, Waycross
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L. H. Griffin, Claxton

Reference Committee No. 4

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James A. Green, Athens
A. V. Gafford, Rome
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Rafe Banks, Gainesville
C. E. McArthur, Cordele
J. H. Arnold, Newnan
H. G. Davis, Jr., Sylvester
Frank R. Mann, Sr., McRae

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George W. Wright, Augusta
Floyd R. Sanders, Decatur
Willis P. Jordan, Columbus
Thomas J. Anderson, Jr., Atlanta
Ralph N. Johnson, Rome
Charles G. Bellville, Bainbridge
Marcus Mashburn, Cumming
Charles R. Williams, Wadley
H. H. Hammett, r., LaGrange

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(Tentative—to be confirmed)

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State Board of Medical Examiners

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Grady N. Coker, Canton
Fred J. Coleman, Dublin
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Q. A. Mulkey, Millen
J. W. Palmer, Ailey (1958)
Alex B. Russell, Windor (1958)
L. W. Willis, Bainbridge (1959)
Paul T. Ccoggins, Commerce
Carl Savage, Montezuma

State Medical Education Board

Raymond Evans, Sr., Clayton, *Chairman* (1961)
J. C. Tanner, Atlanta, *Vice-Chairman* (1961)
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Hal M. Davison, Atlanta (1958)
Bruce Schaefer, Toccoa (1959)
Mr. L. R. Seibert, *Secretary*

State Board of Health

(Meets in April and October)
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Ben K. Looper, Chickamauga (9th District)—1963
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A. G. Funderburk, Moultrie (2nd District)—1963
Maurice F. Arnold, Hawkinsville (3rd District)—1960
Virgil B. Williams, Griffin (4th District)—1961
Harold P. McDonald, Atlanta (5th District)—1960

A. M. Phillips, Macon (6th District)—1962
A. G. Little, Jr., Valdosta (8th District)—1962
D. N. Thompson, Elberton (10th District)—1961

Georgia Dental Association Representatives

J. M. Hawley, Columbus—1958
J. G. Williams, Atlanta, *Vice-Chairman*—1958

Georgia Pharmaceutical Association

Representatives

J. B. Butts, Milledgeville—1959
W. W. Webb, Leslie—1959

Hospital Advisory Council

(Meets in April and October)

Representatives, Georgia Hospital Association

Mr. Oscar Hilliard, Ft. Oglethorpe, *Chairman*—1959
Mr. Arthur T. Stewart, Greensboro—1958
Mr. Terry Hiers, Jr., Americus—1960

Representatives, Medical Association of Georgia

W. L. Pomeroy, Waycross—1959
Rafe Banks, Jr., Gainesville—1959
David Henry Poer, Atlanta—1960
Philip W. Waga, Athens—1960
Milford B. Hatcher, Macon—1958

Representatives, Georgia Dental Association

Thomas Connor, Atlanta—1960

Representative, Georgia Nursing Association

Miss Dana Hudson, Atlanta—1960

Representatives, State-at-Large

Mr. Walter Graefe, Griffin—1960
Mr. J. J. McLanahan, Elberton—1960
H. C. Derrick, Lafayette—1958
Frank W. Allcorn, Jr., Warm Springs—1959
Louis Newmark, Atlanta—1958

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T. F. Sellers, Director, State Health Department
Mr. Eugene Cook, Attorney General
Mr. Alan Kmpfer, Director, State Welfare Department
Mr. B. F. Thrasher, State Auditor

Rehabilitation Member

Mr. A. P. Jarrell, Atlanta—1958

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Tyre Watson, Jr., Ph.G., Decatur
J. H. Riley, Ph.G., Atlanta
A. J. Webster, D.D.S., Rome
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MAG HOUSE OF DELEGATES

Delegates

Alternates

Altamaha (1)

J. B. Brown, Baxley . . . '59 F. D. Kennedy, Baxley

Baldwin (1)

Wilbur M. Scott, Milledgeville . . . '58 Wallace Gibson, Milledgeville

Bartow County (1)

Wm. B. Quillian, Jr., Cartersville . . . '60 Wm. B. Dillard, Jr., Cartersville

Ben Hill-Irwin (1)

H. L. Dismuke, Ocilla . . . '58 Francis M. Ward, Fitzgerald

Bibb County (6)

Allan A. Cole, Macon . . . '58 W. D. Hazlehurst, Macon
W. W. Baxley, Macon . . . '58 Jule C. Neal, Jr., Macon
Milford B. Hatcher, Macon . . . '59 Earl Lewis, Macon
E. C. McMillan, Macon . . . '59 Charles Goswell, Macon
Rudolph Jones, Macon . . . '60 Charles R. Richardson, Jr., Macon
Tom Williams, Macon . . . '60 Waddell Barnes, Macon

Blue Ridge (1)

R. A. Burns, Blue Ridge . . . '59 C. C. Brooks, Blue Ridge

Bulloch-Candler-Evans (1)

L. H. Griffin, Claxton . . . '58 Helen R. Deal, Statesboro

Burke County (1)

C. Thompson, Jr., Waynesboro . . . '60 Lamar Murray, Waynesboro

Carroll-Douglas-Haralson (2)

Phil C. Astin, Carrollton . . . '58 F. M. Parks, Carrollton
C. H. Allen, Bremen . . . '59 J. I. Vansant, Villa Rica

Chattahoochee (1)

Marcus Mashburn, Cumming '59 D. C. Kelley, Lawrenceville

Chattooga (1)

H. A. Goodwin, Jr., Summerville . . . '58 G. H. Little, Trion

Cherokee-Pickens (1)

C. J. Roper, Jasper . . . '60 Ben K. Looper, Canton

Clayton-Fayette (1)

F. A. Sams, Jr., Fayetteville '59 Wells Riley, Jonesboro

Cobb (3)

W. C. Mitchell, Smyrna . . . '58 H. D. Meaders, Marietta
E. P. Inglis, Jr., Marietta . . . '59 F. K. Schmidt, Marietta
Bruce D. Burleigh, Marietta . . . '60 Robert Mainor, Smyrna

Coffee County (1)

Calvin S. Meeks, Jr., Douglas '59 Sage Harper, Douglas

Colquitt (1)

John P. Tucker, Moultrie . . . '58 James R. Paulk, Moultrie

Coweta (1)

J. H. Arnold, Newnan . . . '60 Ben H. Jenkins, Newnan

Decatur-Seminole (1)

Charles G. Bellville, Bainbridge . . . '59 Edwin M. Griffin, Bainbridge

Delegates

Alternates

DeKalb County (3)

Floyd R. Sanders, Decatur . . . '58 John P. Heard, Decatur
George L. Mitchell, Decatur . . . '59 Robert L. Gibbs, Jr., Decatur
L. C. Buchanan, Decatur . . . '60 Howard Lee, Decatur

Dougherty County (2)

Glenn E. Seymour, Albany . . . '58 Charles Hollis, Jr., Albany
Charles G. Lamb, Albany . . . '60 Frank McKemie, Albany

Emanuel County (1)

R. J. Moye, Adrian . . . '58 H. R. Frost, Swainsboro

Flint (1)

Charles E. McArthur, Cordele . . . '60 Woodrow Goss, Ashburn

Floyd County (3)

Ralph N. Johnson, Rome . . . '58 Ralph J. Davis, Rome
A. V. Gafford, Rome . . . '59 Thomas S. Harbin, Rome
R. F. Corpe, Rome . . . '60 Coleman T. King, Rome

Franklin-Hart-Elbert (1)

J. Hubert Milford, Hartwell . . . '60 D. N. Thompson, Elberton

Fulton County (28)

Don F. Cathcart, Atlanta . . . '58 Charles E. Rushin, Atlanta
Cyrus W. Strickler, Jr., Atlanta . . . '58 Vernon E. Powell, Atlanta
Jack C. Norris, Atlanta . . . '58 Herbert S. Alden, Atlanta
A. O. Lynch, Atlanta . . . '58 August B. Turner, Atlanta
Haywood N. Hill, Atlanta . . . '58 Napier Burson, Jr., Atlanta
Richard Wilson, Atlanta . . . '58 Ralph A. Huie, Jr., Atlanta
Amey Chappell, Atlanta . . . '58 Edna S. Porth, Atlanta
Duncan Shepard, Atlanta . . . '58 John N. McClure, Atlanta
Thomas N. Guflin, Atlanta . . . '58 W. Vernon Skiles, Atlanta
J. Frank Walker, Atlanta . . . '59 Philip H. Nippert, Atlanta
Harold P. McDonald, Atlanta . . . '59 Helen W. Bellhouse, Atlanta
Thomas J. Anderson, Jr., Atlanta . . . '59 Lyle F. Herrmann, Atlanta
Alton V. Hallum, Atlanta . . . '59 Edward L. Askren, Jr., Atlanta
A. H. Letton, Atlanta . . . '59 Lamar B. Peacock, Atlanta
Samuel W. Perry, Atlanta . . . '59 Dan Y. Sage, Atlanta
Henry Finch, Atlanta . . . '59 Ralph Murphy, Atlanta
Lester Rumble, Jr., Atlanta . . . '59 Irving L. Greenberg, Atlanta
Mason I. Lowance, Atlanta . . . '59 Edgar Dunstan, Atlanta
James H. Byram, Atlanta . . . '60 Scott L. Tarplee, Atlanta
Linton H. Bishop, Jr., Atlanta . . . '60 Daniel D. Hankey, Atlanta
Fleming L. Jolley, Atlanta . . . '60 Marvin L. Davis, Atlanta
Edwin C. Evans, Atlanta . . . '60 Charles S. Jones, Atlanta
B. L. Shackleford, Atlanta . . . '60 George W. Fuller, Atlanta
Walker J. Jernigan, Atlanta . . . '60 William C. Coles, Atlanta
William W. Bryan, Atlanta . . . '60 Walter Bloom, Atlanta
John Turner, Atlanta . . . '60 John M. McCoy, Atlanta
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John S. Atwater, Atlanta . . . '60 W. Mercer Moncrief, Atlanta

Georgia Medical Society (6)

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Ruskin King, Savannah . . . '58 Allen W. Coward, Savannah
T. A. Peterson, Savannah . . . '59 Richard L. Schley, Savannah
David Robinson, Savannah . . . '59 W. O. Bedingfield, Savannah
John L. Elliott, Savannah . . . '60 Oscar H. Lott, Savannah
W. H. Fulmer, Savannah . . . '60 Leonard Rabhan, Savannah

Glynn County (2)

Joseph B. Mercer, Brunswick '58 Bert H. Malone, Brunswick
C. A. Wilson, Brunswick . . . '60 C. S. Britt, Brunswick

Gordon County (1)

Lewis R. Lang, Calhoun . . . '59 W. D. Hall, Calhoun

Grady County (1)

C. K. Singleton, Cairo . . . '58 Bill M. Bailey, Cairo

Habersham County (1)

F. O. Garrison, Demorest . . . '60 J. J. Arrendale, Cornelia

Delegates	Alternates	Delegates	Alternates
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P. K. Dixon, Gainesville . '58	E. L. Ward, Gainesville	A. G. Little, Jr., Valdosta . '60	Robert L. Stump, Valdosta
Jackson-Barrow (1)		Southeast Georgia (1)	
A. B. Russell, Winder . '59	A. A. Rogers, Jr., Commerce	J. W. Palmer, Ailey . '58	C. W. Findley, Vidalia
Jasper County (1)		Southwest Georgia (1)	
J. H. Pritchett, Jr., Monticello . '58	M. L. Greene, Monticello	James Martin, Edison . '60	Turner Rentz, Colquitt
Jefferson County (1)		Spalding County (2)	
C. Roy Williams, Wadley . '60	Walter J. Revell, Louisville	H. J. Copeland, Griffin . '58	A. S. Fitzhugh, Griffin
		Virgil B. Williams, Griffin . '59	Jackson W. Landham, Jr., Griffin
Jenkins County (1)		Stephens County (1)	
A. P. Mulkey, Millen . '59	John R. Harrison, Millen	M. D. Pittard, Toccoa . '60	H. H. McNeely, Toccoa
Lamar County (1)		Sumter County (1)	
John B. Crawford, Barnesville . '58	J. H. Jackson, Barnesville	Russell Thomas, Americus . '59	R. C. Pendergrass, Americus
Laurens County (1)		Taylor County (1)	
William A. Dodd, Wrightsville . '60	W. P. Roche, Jr., Dublin	R. C. Montgomery, Butler . '58	E. C. Whatley, Reynolds
Crawford W. Long (2)		Telfair County (1)	
James A. Green, Athens . '58	M. A. Hubert, Athens	Frank R. Mann, Sr., McRae . '60	S. T. Parkerson, McRae
R. H. Randolph, Athens . '59	A. Paul Keller, Jr., Athens		
McDuffie County (1)		Thomas-Brooks (2)	
A. G. LeRoy, Thomson . '59	Henry M. Althisar, Thomson	L. M. Shealy, Quitman . '59	Warren Taylor, Thomasville
		Frank A. Little, Thomasville . '58	Park Gerdine, Quitman
Meriwether-Harris (1)		Tift County (1)	
W. P. Kirkland, Manchester '58	Henry C. Jackson, Manchester	Henry K. Jarratt, Tifton . '60	H. Edwin Aderholt, Tifton
Mitchell County (1)		Tri-County (1)	
A. A. McNeill, Jr., Camilla . '60	J. C. Brim, Pelham	O. D. Middleton, Ludowici . '58	I. G. Armistead, Townsend
Muscogee County (4)		Troup County (2)	
Willis P. Jordan, Columbus . '59	Luther Wolff, Columbus	Charles T. Cowart, LaGrange '58	E. W. Molyneaux, LaGrange
Luther Roberts, Columbus . '59	A. B. Conger, Columbus	H. H. Hammett, Jr., LaGrange . '59	Render Turner, LaGrange
S. A. Roddenbery, Columbus '60	James Rhea, Columbus		
Charles R. Smith, Columbus . '60	R. A. Chipman, Columbus		
Newton County (1)		Upson County (1)	
H. E. Griggs, Conyers . '59	J. W. Purcell, Jr., Covington	T. A. Sappington, Thomaston '60	Norman P. Gardner, Thomaston
Ocmulgee (1)		Walker-Catoosa-Dade (2)	
M. F. Arnold, Hawkinsville . '58	J. O. Owens, Abbeville	Fred H. Simonton, Chickamauga . '59	Warren C. Terrell, Fort Oglethorpe
		Howard C. Derrick, LaFayette . '59	Thomas W. Alsobrook, Rossville
Oconee Valley (1)		Walton County (1)	
C. S. Jernigan, Sparta . '60	J. H. Nicholson, Madison	Ralph Wenzel, Social Circle . '58	H. B. Nunnally, Monroe
Peach Belt (1)		Ware County (2)	
H. E. Weems, Perry . '59	Frank Vinson, Fort Valley	Leo Smith, Waycross . '59	Vilda Shuman, Waycross
		W. L. Pomeroy, Waycross . '60	H. Ansley Seaman, Waycross
Polk County (1)		Warren County (1)	
Don Schmidt, Cedartown . '58	R. F. Spanjer, Cedartown	H. B. Cason, Warrenton . '58	A. W. Davis, Warrenton
Rabun County (1)		Washington County (1)	
George H. Boyd, Jr., Clayton '60	J. C. Toole, Clayton	Joseph E. Lever, Sandersville '60	F. T. McElreath, Jr., Tennille
Randolph-Terrell (1)		Wayne County (1)	
R. B. Martin, III, Cuthbert . '59	Earl A. Mayo, Jr., Richland	J. W. Yeomans, Jesup . '59	Fred M. Harper, Jesup
Richmond County (7)		Whitfield County (1)	
R. C. McGahee, Augusta . '58	Alfred M. Battey, Augusta	Paul L. Bradiey, Dalton . '58	George L. Broaddrick, Dalton
Nathan M. DeVaughn, Augusta . '58	Gordon Kelly, Augusta		
A. J. Waters, Augusta . '59	William S. Boyd, Augusta		
J. L. Chandler, Augusta . '59	F. N. Harrison, Augusta		
W. A. Fuller, Augusta . '60	Edwin Rushia, Augusta		
David R. Thomas, Jr., Augusta . '60	W. K. Philpot, Augusta		
George W. Wright, Augusta . '60	C. M. Templeton, Augusta		
Screven County (1)		Worth County (1)	
G. B. Hogsette, Sylvania . '58	Katrine R. Hawkins, Sylvania	H. G. Davis, Jr., Sylvester . '59	William P. Stoner, Sylvester

INFORMATION

Registration

The MAG Official Registration desk will be located adjacent to the main entrance of the Macon Auditorium. It will be open for the registration of the Medical Association of Georgia members and guests at 1:00 noon, Sunday, April 27, 1958, and at 8:00 a.m., Monday and Tuesday, April 28-29. Members and guests should register there *immediately upon arrival* and obtain badges and programs.

Message Center

A message center will be maintained at the MAG official registration desk, Macon Auditorium, to receive incoming calls, and pages from the Women's Auxiliary to the Medical Association of Georgia will staff this center during the entire session. All notices of official nature will be posted on the official bulletin board at the message center.

House of Delegates

The MAG House of Delegates will meet Sunday afternoon, April 27, at 5 p.m. in the Walter Little Room, Dempsey Hotel and will reconvene Wednesday, April 30 at 9:00 a.m. in the Meeting Hall, Macon Auditorium.

Memorial Service

The Medical Association of Georgia will hold its Annual Memorial Service at the opening session of the House of Delegates at 5:00 p.m., Sunday, April 27 in the Walter Little Room, Hotel Dempsey. All members are cordially invited to attend. The service is held in memory of members who died during the past year.

M. A. Acree, Calhoun, December 4, 1957
T. J. Arline, Cairo, July 7, 1957
B. R. Bussell, Waycross, July 15, 1957
Benjamin L. Camp, Atlanta, January 25, 1958
E. F. Chaffin, Toccoa, May 22, 1957
T. C. Clodfelter, Milledgeville, December 27, 1957
Frank Corley, Atlanta, October 7, 1957
J. A. Coyle, Dublin, August 15, 1957
J. W. Daniel, Claxton, June 26, 1957
R. L. Erwin, Dalton, October 16, 1957
Frank Eskridge, Atlanta, October 7, 1957
Eugene B. Ferris, New York, September 22, 1957
Homer Head, Monroe, December 17, 1957
L. P. Holmes, Augusta, October 29, 1957
T. W. Jackson, Manchester, April 30, 1957
J. F. Johnson, Macon, January 12, 1958
Charles E. Lawrence, Atlanta, November 16, 1957
J. E. Lester, Marietta, May 28, 1957
M. S. Levy, Smyrna, May 23, 1957
W. R. McCoy, Folkston, August 31, 1957

Joseph D. McElroy, Atlanta, April 26, 1957
W. C. McGeary, Madison, November 15, 1957
Jay McLean, Savannah, November 14, 1957
R. V. Martin, Savannah, April 15, 1957
L. C. Mitchell, Columbus, November 28, 1957
Clifford Moore, Lindale, April 26, 1957
W. L. Moss, Athens, August 12, 1957
C. G. Moye, Dublin, August 26, 1957
J. T. Norvell, Augusta, December 30, 1957
C. B. Palmer, Covington, June 3, 1957
L. P. Pharr, Auburn, October 14, 1957
Marion G. Pruitt, Atlanta, July 16, 1957
Frank S. Schley, Columbus, October 21, 1957
Edgar D. Shanks, Atlanta, January 2, 1958
L. H. Shellhouse, Willacoochee, January 2, 1958
W. E. Simmons, Metter, August 10, 1957
E. J. Smith, Hahira, August 1, 1957
Linton Smith, Atlanta, December 10, 1957
G. A. Stevenson, Camilla, February 1, 1958
L. B. Taylor, Savannah, April 27, 1957
Lawson Thornton, Atlanta, June 27, 1957
S. A. Visauska, Atlanta, July 15, 1957
S. L. Waites, Covington, October 30, 1957
D. D. Walker, Macon, August 23, 1957
Charles H. Watt, Thomasville, January 27, 1958
R. F. Wheat, Bainbridge, August 5, 1957

Specialty Society Luncheons and Dinners

Certain specialty societies plan to have luncheons on Sunday, Monday, and Tuesday, and dinners on Sunday and Monday during the Association's Annual Session. These events are listed in the official program even though they are not a part of the official program, so please check there for specific times and places.

Woman's Auxiliary

The Woman's Auxiliary to the Medical Association of Georgia will have its Registration Desk on the Mezzanine Floor, Hotel Dempsey. It will be open Sunday, April 27, from 11:00 a.m. to 5:00 p.m.; Monday, April 28, from 8:30 a.m. to 3:30 p.m.; and Tuesday, April 29, from 9:00 a.m. to 12:30 p.m. The complete program giving times and locations of the meetings of the 33rd Annual Convention of the Woman's Auxiliary to the Medical Association of Georgia will be found beginning on page 155.

Social Events

Information about social events planned in conjunction with the MAG annual session and the necessary tickets will be available at the MAG official registration desk, Macon Auditorium, at the time of registration. Your cooperation in purchasing your tickets for these social events at the time of registra-

The above information is subject to change

INFORMATION

tion is requested. Accommodations for social events are limited, and the sponsoring groups cannot be held responsible unless everyone cooperates in this regard. Alumni Dinners for the Medical College of Georgia and the Emory University School of Medicine have been planned and are listed in the program for Monday evening, April 28.

Scientific Exhibits

Scientific exhibits will be displayed in the Macon Auditorium adjacent to the meeting hall. These exhibits should be of great interest to members of the medical profession; they are prepared by physicians who will be on hand to discuss their displays with you. These exhibits are a highlight of the Association's annual meeting.

"Diagnosis and Management of Malignant Melanoma," Garland D. Perdue, M.D., Ralph Vogler, M.D. and Sam A. Wilkins, M.D. "Crawford W. Long Museum," Lester Rumble, Jr., M.D., P. P. Volpitte, M.D., and A. B. Boyd, M.D., "Polyps of the Colon," James V. Rogers, Jr., M.D. and William A. Nelson, M.D.

"Surgical Treatment of Hydrocephalus Using the Holter Valve (Spietz Procedure)," E. F. Fincher, M.D., Dale Richardson, M.D., and F. L. Jolley, M.D.

"Tuberculin Testing," Georgia Tuberculosis Association

"Surgical Correction of Deafness," Claude L. Pennington, M.D.

"Double Pointed Needle for Use in Cardiovascular Surgery," Glynn Brunswick Memorial Hospital Staff

"An Evaluation of Anticholinergic-Tranquilizing Agents in Peptic Ulcer Therapy," John S. Atwater, M.D. and James M. Carson, M.D.

"Carcinoma of the Larynx," Murdock Eguen, M.D.; George Roach, M.D.; Robert Brown, M.D.; and Truitt Bennett, M.D.

"Problems in Diagnosis and Treatment of Diseases of the Chest," Burton T. Hall, M.D.; Burton N. Heine, M.D.; and Robert G. Ellison.

Commercial Exhibits

Approximately 60 commercial exhibits are displayed in exhibit booths in the Macon Auditorium.

will give up-to-date information on the latest products and services available to the profession.

It is *extremely* important that you visit each of these exhibits and register with the exhibitor. Your cooperation is earnestly requested since these displays are designed and shown specifically for your benefit. The exhibitors play a very important role in making this annual session possible.

<i>Booth Number</i>	<i>Exhibitor</i>
1	Wm. S. Merrell Company, Cincinnati, Ohio
2	Lanier Company, Atlanta, Georgia
4	Richards Manufacturing Company, Memphis, Tennessee
6	Roche Laboratories, Division of Hoffman-LaRoche, Nutley, New Jersey
7	Ciba Pharmaceuticals, Summit, New Jersey
8	The Upjohn Company, Kalamazoo, Michigan
9	Electric Research Corp., Atlanta, Georgia
10	Ortho Pharmaceutical Corp., Raritan, New Jersey
11	Pfizer Laboratories, Brooklyn, New York
12	Ross Laboratories, Columbus, Ohio
13	Kremers-Urban Company, Milwaukee, Wisconsin
14	E. R. Squibb & Sons, New York, New York
15	VanPelt & Brown, Inc., Richmond, Virginia
16	American Surgical Supply Company, Atlanta, Georgia
17	A. S. Aloe, Chamblee, Georgia
18	Desitin Chemical Company, Providence, Rhode Island
21	Swift & Company, Chicago, Illinois
23	Doho Chemical Company, New York, New York
26	General Electric Company, X-Ray Department, Atlanta, Georgia
27	Milex Southern, Weatherford, Texas
28	Security Life Insurance Company, Macon, Georgia
29	Medco Products Company, Tulsa, Oklahoma
30	A. H. Robins Company, Inc., Richmond, Virginia
31	Merck-Sharp & Dohme Company, Inc., Philadelphia, Pennsylvania
32	Riker Laboratories, Inc., Los Angeles, California

— be sure to check with the Official Program

INFORMATION

<i>Booth Number</i>	<i>Exhibitor</i>		
34	Sandoz Pharmaceuticals, Hanover, New Jersey	60	Schering Corporation, Bloomfield, New Jersey
35	Wachtel's Physicians Supply Company, Savannah, Georgia	61	Brooks-Burke Surgical Supplies, Atlanta, Georgia
36	Warner Chilcott Laboratories, New York, New York	66	Westwood Pharmaceuticals, Buffalo, New York
39	S. E. Massengill Company, Bristol, Tennessee	68	Winthrop Laboratories, New York, New York
40	Pet Milk Company, St. Louis, Missouri	69	Eli Lilly & Company, Indianapolis, Indiana
41	Dictaphone Corporation, Atlanta, Georgia	70	U. S. Vitamin Corporation, New York, New York
42	deLeon Laboratories, Atlanta, Georgia	71	Eaton Laboratories, Norwich, New York
43	The Coca Cola Company, Atlanta, Georgia		
44	G. D. Searle & Company, Chicago, Illinois		
45	The Stuart Company, Chicago, Illinois		
46	Wm. P. Poythress & Company, Inc., Richmond, Virginia		
48	Abbott Laboratories, North Chicago, Illinois		
49	Lederle Laboratories Division American Cyanamid Company, Pearl River, New York		
49	Lederle Laboratories Division American Cyanamid Company, Pearl River, N. Y.		
51	Carnation Company, Los Angeles, California		
53	Estes Surgical Supply Company, Atlanta, Georgia		
54	C. B. Fleet Company, Inc., Lynchburg, Virginia		
55	The Warren Teed Products Company, Columbus, Ohio		
57	Parke, Davis & Company, Detroit, Michigan		
58	Geigy Company, Inc., New York, New York		
59	Charles C. Haskell & Company, Inc., Richmond, Virginia		

Fifty Year Members

The following list contains the names of all the members of the Medical Association of Georgia who, as of this year 1958, have practiced medicine for 50 years. It does not record the names of physicians who have already received gold membership cards; this is the class of '57 only.

William A. Arnold	Atlanta
Ovid B. Bush	Atlanta
William J. Cranston	Augusta
William P. Durham	Abbeville
George L. Echols	Milledgeville
William H. Houston	Colquitt
Guy G. Lunsford	Atlanta
King W. Milligan	Augusta
Nathan J. Newsom	Sandersville
Herbert J. Rosenberg	Atlanta
Harold Shields	Chickamauga
Stephens, Robert G.	Washington
Dallas N. Thompson	Elberton
Charles Usher	Savannah
Joshua S. Williams	Macon
Henry D. Youmans	Lyons

VOTING RULES

By-Laws, Chapter V, Election of Officers

SECTION 3, METHOD. The President shall appoint a committee of not less than three Tellers immediately after the close of nominations, who shall have charge of the election. The Secretary shall have prepared in advance an official ballot and an official ballot box, which shall be kept in the custody of the Tellers Committee. One ballot only shall be given to each active voting member when he presents himself to cast his ballot. Such member and no other shall prepare his ballot and shall deposit it at that time in the locked ballot box.

The candidates for office receiving a majority of the votes shall be declared elected, but if no majority is received on the first ballot, the members present shall select by secret ballot the officer from the two candidates having the highest number of votes.

SECTION 4. TIME. Voting shall take place during the hours of the scientific program up to the beginning of the last meeting on the last day of the annual session. At that time the Committee of Tellers shall count the ballots and report their findings to the members.



president's letter

THIS IS THE program issue of your medical journal. I hope that each and everyone of you will read this program and save it and make plans to be at the convention in Macon. Your program committee and entertainment committee have gone all out to make this convention one of the best in the history of MAG. The facilities at Macon have been improved and will be better able to care for you, so let's all turn out for the biggest and best Annual Session ever.

The program committee has worked with seventeen specialty groups. I think that they have one of the most outstanding programs that we have had in some time, and I am sure that there is at least one paper that you will be primarily interested in.

At this time I would like to reiterate that at the Annual Convention the year's work of your organ-

ization is outlined. It is here that policies will be decided and the work of the year will be set up, so come yourself and see that your delegate is here and informed as to your wishes; but best of all, meet your friends and classmates to reminisce and talk over your experiences and your problems with others that have the same problems and similar experiences. That makes a real convention, and Macon will be one! See you there!

W. B. SCHAEFER, M.D., Toccoa, Georgia

OFFICIAL CALL

to the Officers and Members of the
Medical Association of Georgia:

THE *104TH ANNUAL SESSION of the Medical Association of Georgia will be held in Macon, Georgia, April 27-30, 1958.

The MAG official registration desk will be located in the Macon Auditorium and will be open for registration of MAG members and guests at 12:00 noon, Sunday, April 27, and at 8:00 a.m. Monday and Tuesday, April 28 and 29. The desk will close at the end of the last meeting each day.

The House of Delegates will convene at 5:00 p.m., Sunday, April 27 in the Walter Little Room, Hotel Dempsey, and be reconvened Wednesday, April 30, at 9:00 a.m. in the meeting hall, Macon Auditorium.

The scientific session of the Association will open April 27 with specialty society programs beginning at 2:00 p.m. and continuing on Monday afternoon, Tuesday morning, and Tuesday afternoon. Three scientific general sessions will be held as follows: General Session (G.P. Day) 9:00 a.m. Monday morning; General Session (G.P. Day) reconvened at 8:15 p.m. Monday evening, and General Session lectureships 11:30 a.m. Tuesday morning. Two business general sessions will be held as follows: 11:45 a.m. Monday and 11:30 a.m. Wednesday.

Sunday, April 27

- 2:00 p.m. Pediatrics, Orthopedics, and Radiology Joint Section
- 2:00 p.m. Psychiatry and General Practice Joint Section
- 5:00 p.m. MAG House of Delegates

Monday, April 28

- 8:30 a.m. General Session Scientific (G.P. Day)
- 11:45 a.m. General Session Business
- 2:30 p.m. Orthopedics, Surgery, Anesthesiology, Pathology, and Industrial Surgery Joint Section.
- 2:30 p.m. Medicine, Neurosurgery, EENT Joint Section
- 2:30 p.m. Radiology
- 8:15 p.m. General Session Reconvened (G.P. Day)

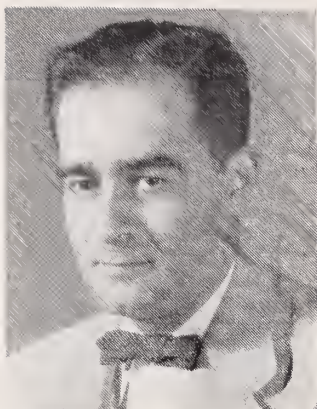
Tuesday, April 29

- 9:00 a.m. Medicine, Chest, Diabetes, and EENT Joint Section
- 9:00 a.m. Obstetrics and Gynecology, General Practice, and Anesthesiology Joint Section
- 11:30 a.m. General Session Scientific (Lecture-ship)
- 2:30 p.m. Obstetrics and Gynecology, General Practice, and Pathology Joint Section
- 2:30 p.m. Surgery

GUEST SPEAKERS

Joseph F.
Artusio, M.D.
New York, N. Y

*Sponsored by
Georgia
Society of
Anesthesiologists*



JOSEPH F. ARTUSIO, JR., M.D., New York, N.Y., Professor of Anesthesiology in Surgery at Cornell University Medical College, will speak Monday, April 28, at 3:15 p.m., on the subject "Anesthesia for Surgery of Trauma."

A native of Jersey City, New Jersey, Dr. Artusio received his education at St. Peter's College, Jersey City, and at Cornell University Medical College. He served in the Medical Corps of the U.S. Army for

two years following which he did his residency in anesthesiology at New York Hospital.

Dr. Artusio is a diplomate of the American Board of Anesthesiology, a member of the American Society of Anesthesiologists, the Association of University Anesthetists, the American Society for Pharmacology and Experimental Therapeutics, the Society for Experimental Biology and Medicine, and a fellow of the American College of Anesthesiologists.

The following is a summary of Dr. Artusio's paper:

The traumatized patient presents many problems for the anesthesiologist. Over-zealous treatment of pain produces severe effects on the circulatory compensatory mechanisms, which effects are detrimental to the survival of the patient.

Proper management of the patients airway and ventilation will be discussed and the relationship of gastric contents and the airway will be stressed. Hypovolemic shock and its management will be discussed and how it is affected by the anesthetic state.

The choice of an anesthetic agent and technique will be presented with particular reference to level of central nervous system depression.

John A.
Campbell, M.D.
Cincinnati, Ohio

*Sponsored by
Georgia
Radiological
Society*



JOHN A. CAMPBELL, M.D., of Indianapolis, Indiana, was born in Cincinnati, Ohio. He attended the University of Cincinnati and received his medical degree there in 1937. He served his internship at Detroit Receiving Hospital and took postgraduate radiology training at the Henry Ford Hospital.

Dr. Campbell is at present chairman of the Department of Radiology at the Indiana University Medical Center; Director, Department of Radiology and Consultant in Radiology at Indiana University Hospital and affiliated hospitals.

He is a fellow of the American College of Radiology, a member of the Radiological Society of North America, and a member of the Association of University Radiologist.

Dr. Campbell will address the Pediatrics, Orthopedics, and Radiology Joint Section, April 27, at 3:45. His subject "Roentgen Evaluation of Cranial Asymmetry in Infants" is summarized below:

Asymmetry of the skull may involve the vault, base occipital, and frontal regions, or combinations of these areas. It can result from exogenous causes such as prolonged recubency and torticollis from abnormalities of cranial and sutural growth, and from intracranial processes which locally increase or decrease the skull volume.

Decreased or increased growth stresses govern the thickness of the skull tables and diploe, the convolutional patterns, and the hypertrophy of the sinuses and mastoids. Arrested or unequal growth rates along the sutures cause shortening, lengthening, and traction deformities of various skull components.

The basilar skull roentgenogram is useful in differentiating certain types of asymmetry. The basilar outline of an infant's skull is normally a perfect oval, and the anterior margins of the two middle fossae and posterior fossae are directly opposite one another. Characteristic deformities of these contours occur with hemicraniosynostosis, subdural hematomas, scoliosis capitis, cerebral atrophies, and neurofibromatosis.

On Monday, April 28, Dr. Campbell addressed the Radiology section on "Radiology of Patent Ductus Arteriosus." A summary of the paper follows:

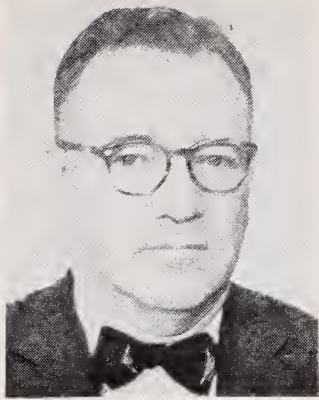
The roentgen appearance of the heart and great vessels in patent ductus arteriosus varies considerably with such factors as age, amount and direction of blood flow, pulmonary resistance, as well as with the presence of associated malformations. Certain morphological changes established on selective cinecardioangiography may also be recognized as plain film studies and occur frequently enough to be of some diagnostic value; others may be correlated with the dynamics seen on fluoroscopy.

The aorta not infrequently shows a rather specific configuration in patent ductus. Other changes such as dilatation of the left auricle, left ventricle, and pulmonary arteries are much less specific, but may have certain differential significance.

A review of the Roentgen studies of over 100 cases was carried out to evaluate the frequency of these diagnostic criteria and to test their usefulness in the differential diagnosis of condition which show similar hemodynamic dysfunctions.

Paul T.
Chapman, M.D.
Detroit, Michigan

*Sponsored by
Georgia Chapter
American College
of Physicians and
Georgia Heart
Association*



PAUL T. CHAPMAN, M.D., Detroit, Michigan, Tuberculosis Controller, Department of Health, Herman Kiefer Hospital, is well known for his work in the field of tuberculosis. He is a graduate of the University of Cincinnati where he obtained both his B.S. degree and M.D. He served his rotating internship and residency at City Hospital, New York, and was later resident in tuberculosis at the Maybury Sanatorium and Herman Keifer Hospital. Dr. Chapman is a member of the American Trudeau Society, a member of the Tuberculosis Sanatorium Commission, a member of the Board of the Michigan Tuberculosis Association, and a member of the Michigan Trudeau Society.

On Monday, April 28, Dr. Chapman will speak to the G. P. Day General Session on the subject "Long Term Results of Tuberculosis Chemotherapy." Some ideas which will be developed in this talk are presented here:

This study involves approximately 5,000 patients treated for tuberculosis with modern chemotherapy. Some have received surgery in addition. At least a portion of the therapy has been carried on in out patient circumstances following variable periods of hospital care.

The results of this large series, some of whom have been followed six years after discharge, have been analyzed on the basis of background data such as age, sex, race, extent and duration of disease as well as the various treatment schedules offered.

The relapse rate and deaths in this group are very low, being less than five per cent, and compare favorably to our previous experience. The factors influencing relapse and contributing to deaths are reported.

At the Tuesday morning meeting of the Medicine, Chest, Diabetes, and EENT Joint Section, Dr. Chapman speaks at 10:30 a.m. on "Acute Pulmonary Suppuration and Tuberculosis." A summary of this paper is as follows:

There seems to be some evidence that the problem of acute suppurative disease has increased, particularly in this last winter. This may be related to the appearance of more resistant staphylococci and other pathogens as a result of widespread use of penicillin and broad spectrum antibiotics. Prior to the advent of penicillin approximately 75 per cent of the patients with staphylococcus infections complicated by septicemia died.

This experience improved remarkably in the subsequent period, being reduced to something less than 30 per cent by 1945. Thereafter, however, the mortality increased to a rate of 50 per cent or higher by 1950 and by 1955 some 70 per cent of these organisms have been found to be resistant to penicillin. There is also increasing amounts of resistance to the newer agents such as tetracycline, erythromycin and novobiacin.

Patients infected with suppurative pathogens appear to be somewhat on the increase and present a problem of differential diagnosis with tuberculosis since early diagnosis and adequate therapy may be life saving. Both diseases may co-exist. The treatment, both medical and associated surgery, is discussed in the presentation of cases which characterize the problem.

Jim Cherry
Decatur, Georgia

*Sponsored by
Georgia
Academy of
General Practice*



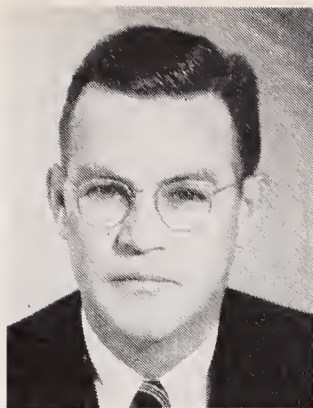
JIM CHERRY, Decatur, Supt. DeKalb County School System, is a member of the panel "Three Faces of Adam," which will be presented at the G.P. Day General Session, April 28. Mr. Cherry's part of the forum is entitled "The Face He Shows His Patients."

Mr. Cherry is a native Georgian and a graduate of Georgia Teachers College, the University of North Carolina, the University of Georgia, and Emory University. Before entering World War II as an air navigation officer, he taught at Douglas High School, Waycross, and Albany, where he was elected principal.

Mr. Cherry is active in both civic and educational work. He is vice president of the DeKalb County Chamber of Commerce and was for several years a member of the Education Committee of the Georgia State Chamber of Commerce. He is now president of the DeKalb Unit of the American Cancer Society. He is a life member of the National Education Association, a member of the Georgia Education Association and past president of the latter organization. He is also a member of the National Committee on Scholarships and Education of the American Legion.

James J.
Griffitts, M.D.
Miami, Florida

*Sponsored by
Georgia Association
of Pathologists*



JAMES J. GRIFFITTS, M.D., Miami, Florida, will appear twice on the program with DONALD W. SMITH, M.D., also of Miami, in a joint discussion. On Monday, April 28, at the Orthopedics, Surgery, Anesthesiology, Pathology, and Industrial Surgery Joint Section, Drs. Griffitts and Smith will present, under the title "Blood Replacement and Transfusion Reactions," some aspects of the use of blood and its major components. They will outline the causes of frequent unfavorable reactions to blood

transfusions to recipients and point out the problems which present themselves to blood transfusion service in the avoidance of undesirable reactions to blood and its components.

On Tuesday, the two will discuss the occurrence of hemolytic disease of the newborn from the standpoint of frequency and causes, outline the problems wherein difficulties can be anticipated by the obstetrician and the ability of the laboratory to give prognostic information of value to obstetricians and pediatricians.

Dr. Griffitts, received his college and medical education at the University of Virginia and served his internship at Lakeside Hospital, Cleveland, Ohio. He entered the United States Public Health Service in 1939 and was assigned to the National Institutes of Health in 1940 where he carried out research work in the field of immunology. He later became the associate director of the John Elliott Blood Bank of Dade County. Dr. Griffitts is president of the Dade Reagents, Inc., president of the Florida Association on Blood Banks, and past president of the American Association of Blood Banks.

Gunnar
Gunderson, M.D.



GUNNAR GUNDERSON, M.D., LaCross, Wisconsin, President-Elect of the American Medical Association, is speaker for the House of Delegates Meeting, Sunday, April 27, 5:00 p.m. In his talk to the delegates, Dr. Gunderson discusses the functions of the AMA, describing it as "a vehicle designed to serve all doctors and citizens," which must be equipped to meet modern day problems and which must be in top performance at all times. "It must be compact and easy to handle," states Dr. Gunderson, "yet large enough to perform its functions of promoting medical science and better health in America." He feels that too many Americans think medicine is merely proud of its past, too content with the present, and not willing to see the problems of the future. Dr. Gunderson declares that

this is a mistaken idea and advocates that the American doctors must develop concrete, decisive, positive health and scientific programs in the interest of every American citizen.

Dr. Gunderson obtained his B. S. at the University of Wisconsin and his M.D. at Columbia University in 1920. He served his internship and residency at LaCrosse Lutheran Hospital.

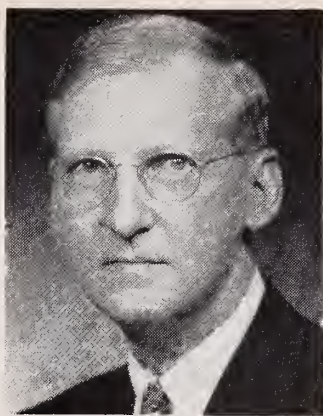
Dr. Gunderson is a native of LaCrosse and at present is engaged in the private practice of medicine, operating the Gunderson Clinic in conjunction with three other physician brothers. He is a past president of the Wisconsin State Medical Association and a past speaker of its House of Delegates. He is now chairman of the AMA Board of Trustees.

He was the first chairman of the Joint Commission on Accreditation of Hospitals when it was formed in 1951. He is a past president and former member of the State Board of Regents of the University of Wisconsin. Currently he is preceptor in charge of the medical students who come up from the University of Wisconsin to the Gunderson Clinic.

He is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and the International College of Surgeons, a member of the Council of the World Medical Association, and a member of the American Public Health Association.

George T.
Harrell, M.D.
Gainesville, Florida

Sponsored by
Georgia Diabetics
Association



GEORGE T. HARRELL, M.D., Gainesville, Florida, Dean of the College of Medicine, University of Florida, will present a paper to the Medicine, Chest, Diabetes, and EENT Joint Section, Tuesday, April 29, on "Urinary Infections in Diabetes." In his lecture Dr. Harrell will discuss the following ideas:

Infections of all types are more common in diabetics than in the general population. Urinary infections are particularly important since they lead to a fetal complication—septicemia which most commonly is due to gram negative rods. Acute infections may present an emergency particularly acute papillitis or metastatic abscesses due to staphylococci chronic infections commonly are the reason for difficulty in regulation of the diabetes.

Diagnosis should be directed first toward detection of the etiologic agent by stains of the centrifuged sediment of a catheterized urine coupled with culture. Special techniques are necessary to detect microaerophilic

streptococci. Mechanical obstruction should be looked for with intravenous urograms. A neurologic bladder with residual urine may be the cause of recurrences of infection.

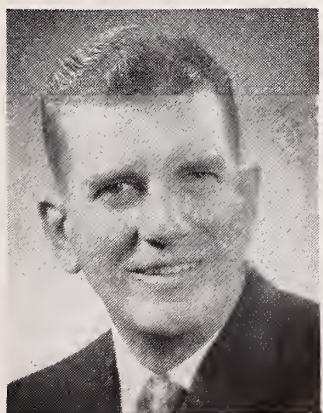
Therapy should be directed first at the regulation of the diabetes. Insulin, preferably the short acting type, should be used until the infection is completely cleared. The role of the sulfonamide derivatives which have an insulin like action has not been established in infections. Chemotherapy should be instituted immediately in acute infections. Sulfonamides will control most gram negative infections. A combination of penicillin and streptomycin is most effective with gram positive cocci. Broad spectrum antibiotics produce side effects and should be used sparingly and for short periods of time. Vitamin metabolism is often upset in diabetes, particularly during infections so that supplements should be increased. Chronic infections may require alternation of chemotherapeutic agents. Often a slight acidosis alternating with reversal of the pH by alkalinizing drugs is effective. Mechanical obstruction should be corrected after acute infection is under control. In very long standing chronic infections intermittent prophylactic therapy with general supporting measures may be necessary.

Dr. Harrell is Associate Editor of the *Journal of the Florida Medical Association* and has been on the editorial boards of several other medical journals. He is a well known lecturer and exhibitor as well as researchist, having received many research grants for his work in the field of infectious diseases.

He is a member of the American Society of Tropical Medicine, American Society for Clinical Investigation, the Southern Society for Clinical Research and a fellow of the Royal Society of Tropical Medicine.

James R.
Maxfield, M.D.
Dallas, Texas

Sponsored by
Jonte Equen
Memorial
Leadership



JAMES R. MAXFIELD, JR., M.D., Dallas, Texas, will be the Jonte Equen Memorial Lectureship speaker at 11:30, Tuesday, April 29. His address on "Atomic Medicine—Use of Radioactive Isotopes in Medicine and Surgery." is summarized below:

The presentation of this subject will deal particularly with the practical uses of atomic energy in clinical medicine and surgery. Evaluation of techniques and of diagnosis and treatment by various radioactive isotopes will be made. The advantages of the use of radioactive materials in certain instances will be stressed.

The major radioactive isotopes that will be emphasized will be radioactive phosphorus (P-32), radioactive

iodine (I-131), radioactive gold (Au-198), radioactive strontium (Sr-90), radioactive chromium (Cr-51), and radioactive cobalt (Co-60).

The effectiveness of these radioactive materials, the techniques of utilization in determining the total blood volume, tracers of metabolic functions, determination of uptake in malignant processes, as well as for therapy in both benign and malignant conditions will be illustrated.

A look into the future as to what may be expected will be portrayed. Emphasis will be given to the responsibility of all physicians in this nuclear age.

Dr. Maxfield was born in Grand Saline, Texas, and attended Baylor University where he obtained his medical degree. He served as intern at the United Hospital, Port Chester, New York and as a fellow in radiology at Baylor. Dr. Maxfield is at present in clinical and private practice of radiology in Dallas.

Dr. Mayfield is a member of the American Radium Society, Radiological Society of North America, American Cancer Society, American College of Radiology, the British Institute of Radiology, a trustee of the Society of Nuclear Medicine, Secretary-Treasurer of the Southwestern Society of Nuclear Medicine, and a medical representative of the South's Regional Advisory Council on Nuclear Energy.

William F.
Mengert, M.D.
Chicago, Illinois

*Sponsored by
Georgia State
Obstetrical and
Gynecological
Society*



WILLIAM F. MENGERT, M.D., Chicago, Illinois, professor and head of the department of Obstetrics and Gynecology, University of Illinois College of Medicine, will speak Monday, April 28, at the G.P. Day General Session on "Prolonged Labor." Dr. Mengert also appears before the Obstetrics and Gynecology, General Practice, and Anesthesiology Joint Section to discuss the topic "Stress Incontinence of Urine."

A graduate of Johns Hopkins Medical School, Dr. Mengert served his rotating internship at the University Hospitals, Iowa City. He was resident, Department of Obstetrics and Gynecology at the State University of Iowa where he later held the position of associate professor. Before coming to the University of Illinois, College of Medicine, he was professor and chairman of the department of Obstetrics and Gynecology, Southwestern Medical School of the University of Texas.

Dr. Mengert is the 1957-58 president of the American Association of Obstetricians and Gynecologists and is a past president of the American College of Obstetrics and Gynecology. He is a member of the American Gynecological Society, a fellow of the American College of Surgeons, and honorary fellow of the International College of Surgeons, a past president of the Central Association of Obstetricians and Gynecologists, and a past secretary and chairman of the Section on Obstetrics and Gynecology of the American Medical Association.

Robert N.
Reynolds, M.D.
Boston, Massachusetts

*Sponsored by
Georgia Society
of Anesthesiology*



ROBERT N. REYNOLDS, M.D., Boston, Massachusetts, will speak to the Obstetrics and Gynecology, General Practice, and Anesthesiology Joint Section, Tuesday, April 29, on "Anesthesia in Uncomplicated and Complicated Obstetrics." In his talk, Dr. Reynolds will consider the following concepts:

The skill and experience of the anesthetist are the important factors in avoiding anesthetic complications in obstetrical anesthesia. Most recent surveys show that spinal and other regional techniques produce less fetal respiratory depression than the inhalation or intravenous techniques, and certainly they are safer if the mother has a full stomach, as a large proportion of maternal anesthetic deaths are caused by pulmonary complications following aspiration of vomitus. Inhalation anesthesia can be given safely for the mother

and the infant, but greater skill and judgment on the part of the anesthetist are required.

The dosage and timing of medication for labor pain is another critical factor in good anesthetic management. Too often too much medication is given too close to the time of delivery and the infant is born at the time of peak depression. Nitrous oxide or trichlorethylene administered briefly with labor pains provides good analgesia and does not depress the infant. This type of analgesia combined with regional pudendal block for delivery is the safest anesthesia for both mother and infant.

In practice routine medication and anesthetic techniques should be avoided; the type and dosage of medication and the anesthetic agents and techniques should be selected for each patient according to her particular obstetrical and general medical background. This is particularly true in complicated obstetrics. Full cooperation between the obstetrician and anesthetist is another important factor in determining a successful outcome. The anesthetist is also ready to resuscitate the newborn in cooperation with the pediatrician.

Born in Troy, N.Y., Dr. Reynolds studied at Yale University and received his medical degree from Albany Medical College in 1946. He did his internship at Albany Hospital in New York following which he served two years in the U.S. Navy.

Dr. Reynolds was assistant anesthetist at the New England Center Hospital and Instructor in Anesthesia at Tufts. He is now anesthetist of the New England Center Hospital and Assistant Professor of Anesthesia at Tufts and a diplomate of the American Board of Anesthesia.

**William A.
Silverman
New York, N. Y.**

*Sponsored by
Georgia
Pediatric
Society*



WILLIAM A. SILVERMAN, M.D., New York, N.Y., will appear twice on the program. On Sunday, April 27, at 3:15, Dr. Silverman will address the Pediatrics, Orthopedics, and Radiology Joint Section on the subject of "Medical Problems of the Newborn and Infancy." A resume of this talk is as follows:

It has been demonstrated that the survival of premature infants in the first days of life can be influenced by manipulating the physical conditions of the environment. As a result of this experience, the optimal conditions of ambient temperature and humidity for these infants can be stated with some assurance.

The problem of infection in very young infants continues to be a serious one despite the availability of potent specific drugs. It is not clear whether this disappointing state of affairs is the result of defective

defense mechanisms among these infants or the result of late diagnosis. Both factors are important and will be discussed.

Should newborn infants, premature or full term, who develop marked hyperbilirubinemia unassociated with Rh or A-B-O incompatibility be treated with exchange transfusions? This question is a serious one among premature infants since one fifth to one fourth develop marked hyperbilirubinemia during the first week of life. The evidence will be reviewed.

On Monday, April 28, he will speak at the G.P. Day General Session on the topic "The First Day of Life." A precis of this talk is given below:

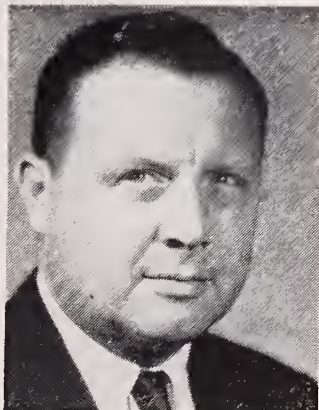
Resuscitation of newborn infants who fail to breathe requires the attention and skills of all who are present in the delivery room. An approach to this problem will be reviewed. The initial care and evaluation of the newborn will be reviewed.

Specific problems of the respiratory distress syndrome, intracranial hemorrhage, diaphragmatic hernia, esophageal atresia, intestinal obstruction, and sepsis of the newborn will be reviewed.

Dr. Silverman was born in Cleveland, Ohio, and reared in Los Angeles, California. He attended the University of California Medical School and did his internship and residency at the University of California Hospital. He is at present affiliated with the Babies' Hospital in New York City as a resident and attending physician. Dr. Silverman is also assistant professor of clinical pediatrics, College of Physicians and Surgeons, Columbia University.

**Frank N.
Stelling
Greenville, S. C.**

*Sponsored by
Georgia
Orthopedic
Society*



FRANK H. STELLING, M.D., Greenville, South Carolina, will address the Pediatrics, Orthopedics, and Radiology Joint Section, Monday April 27, at 4:15, on the subject of "The Management of Congenital Deformities in Infancy." In this talk Dr. Stelling will discuss the following ideas:

The more common orthopaedic congenital anomalies and some of the less frequent ones will be discussed. The presentation will deal with the management of these conditions during the first years of life. Emphasis will be placed on early recognition of some of these deformities.

Indications and contraindications for early therapy along with pitfalls encountered in some methods of treatment will be considered.

Dr. Stelling will speak again on Monday, April 28, before the G.P. Day General Session. At that

time he will talk on "The Hip from Infancy to Old Age."

Early recognition of hip pathology will often lead to correct therapy and good results, whereas late recognition of the same condition will have allowed time for development of such changes that only salvage procedures may be performed.

Most of the lesions are closely related to age groups, probably more so than any other anatomical part.

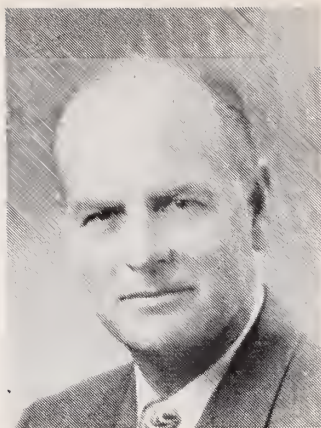
The hip will be discussed with emphasis on diagnosis and therapy in relationship to this chronological order including the changes in the pathology of the same condition as the patient ages.

A graduate of the University of Georgia Medical School, Dr. Stelling did his residency in orthopedic surgery at the Gallinger Municipal Hospital, Washington, D.C.

Dr. Stelling is orthopedic surgeon for area two, South Carolina State Crippled Children's Division, orthopedic surgeon for Southern Railroad, and Medical Advisor to Liberty Mutual Insurance Company. He is also affiliated with several state hospitals. Dr. Stelling is a member of the Southeastern Surgical Congress, the World Medical Association, the American Academy of Orthopedic Surgeons, the South Carolina Orthopedic Association, the Association of Southern Railway Surgeons, the South Carolina Industrial Medical Association, the American Academy of Cerebral Palsy, and a fellow of the American College of Surgeons.

Donald W.
Smith, M.D.
Miami, Florida

*Sponsored by
Georgia
Association
of Pathologists*



DONALD W. SMITH, Miami, speaks with James J. Griffiths on Monday, April 28, on the subject "Blood Replacement and Transfusion Reaction." Dr. Smith is a professor of Clinical Surgery at the Uni-

versity of Miami School of Medicine. He is a Fellow of the American College of Surgeons and a diplomate of the American Board of Surgery. A resume of his discussion follows:

Physiologic factors in replacement therapy are important considerations in selection of the blood component or other expander to be administered following severe industrial accidents.

Delayed replacement following arrested hemorrhage may result in an overload reaction because spontaneous expansion and laboratory evidence of hemodilution may be misinterpreted. When initial replacement is inadequate or delayed the total requirement will be greater. The malnourished patient or the aged senile individual, when injured, requires carefully planned, repeated transfusions due to volume instability resulting from low plasma colloid. The previous condition of the patient; the promptness of transfusion; and the selection of blood, component, or expander utilized are important considerations in the massive or multiple transfusion of the seriously injured.

James E.
Thompson, M.D.
New York, N. Y.

*Sponsored by
Georgia Chapter,
American College
of Surgeons*



JAMES EDWIN THOMPSON, New York, N.Y., was born in Galveston, Texas. He attended the University of Texas where he received both his B.A. and medical degrees. Dr. Thompson is a fellow of the American Surgical Association, the New York Medical-Surgical Society, the Southern Surgical Association, and the New York Surgical Association. He is at present chief of the Surgical Service of the Roosevelt Hospital and Associate Professor of Clinical

Surgery, College of Physicians and Surgeons, Columbia University.

Dr. Thompson speaks twice to members of the Association. Monday, April 28, at 4:15, he addresses the Orthopedics, Surgery, Anesthesiology, Pathology, and Industrial Surgery Joint Section on the subject "Shock in Severe Industrial Injuries and War Wounds." A short resume of this talk is as follows:

The presence of shock and its treatment in severe industrial injuries and war wounds is discussed in its relationship to the extent of injury and the site of body involvement. Extensive vascular, thoracic, and abdominal injuries in particular will be discussed.

Also a featured speaker for the Surgery Section, Tuesday, April 29, Dr. Thompson discusses "Surgery in the Treatment of Peptic Ulcer." A review of this paper is given below:

The paper describes the present trends in the surgical treatment of gastric and duodenal ulcer. Consideration is given to complications and their relationship to the mortality rate.

Consideration is also given to the emergency treatment of massive hemorrhage and perforation of peptic ulcer as complications of gastric and duodenal ulceration.

George P.
Whitelaw, M.D.

*Sponsored by
Georgia Chapter,
American College
of Surgeons*



GEORGE P. WHITELAW, M.D., Boston, Massachusetts, is featured twice on the program, speak-

ing first on April 28, at 3:15, to the Medicine, Neurosurgery, and EENT Joint Section on the subject "The Surgical Treatment of Hypertension." A precise of the talk follows:

The method of study of patients with continuous and progressive hypertensive cardiovascular disease is given. Comparison of follow-up results of surgically and non-surgically treated patients is given in the form of survival curves following treatment.

Particular emphasis is given to combined treatment, namely, *medical* and *surgical* for those patients who are found to be unsuitable for medical treatment alone, either because of inability to follow the treatment, lack of tolerance to the drug or lack of response to various combinations of medical therapy.

Prolonged medical treatment that is ineffective should indicate strong consideration for surgical intervention.

The technique of lumbodorsal splanchnicectomy is described and mortality figures for the operative procedure are shown.

On Tuesday, April 29, Dr. Whitelaw addresses the Surgery Section discussing the topic "Diagnostic and Therapeutic Nerve Blocks." Below is a review of the contents of this paper:

The mechanism of pain is briefly discussed. Techniques for stellate ganglion and lumbar sympathetic blocking procedures is described.

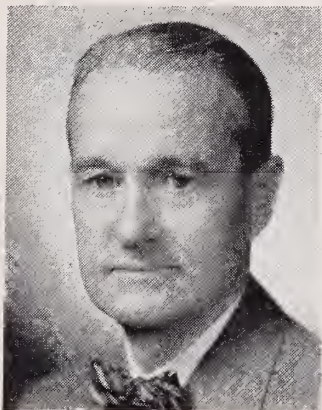
Various conditions in which these maneuvers are helpful in either diagnosis or treatment are discussed. Several case histories illustrating results in some of

these conditions are briefly mentioned.

Dr. Whitelaw was born in New York City. He graduated from Yale College in 1931 and from Harvard Medical School in 1935. He is at present engaged in the private practice of general surgery in Boston and is an associate professor of surgery at the Boston University School of Medicine. Dr. Whitelaw is also director of graduate training in surgery, Massachusetts Memorial Hospitals and an assistant of the surgical teaching program, Boston University School of Medicine.

**Robert W.
Wilkins, M.D.**
Boston, Massachusetts

*Sponsored by
Georgia Chapter,
American College
of Physicians and
Georgia Heart
Association*



ROBERT W. WILKINS, M.D., Boston, Massachusetts, well known cardiologist, speaks Monday, April 28, at the G.P. Day General Session on "The Treatment of Congestive Heart Failure." In his talk Dr. Wilkins will review the use of diet and drugs, particularly newer diuretics, in the management of con-

gestive failure. Appearing before the Medicine Neurosurgery, and EENT Joint Section on April 28, he will discuss the use of drugs, particularly in combination, for the control of high blood pressure in a talk entitled "The Drug Treatment of Hypertension."

A graduate of Harvard Medical School, Dr. Wilkins interned and had a research fellowship at the Boston City Hospital. He taught for two years at Johns Hopkins before coming to Boston University. He is now professor of medicine and associate director of the Evans Memorial Department of Clinical Research and Preventive Medicine, associate physician-in-chief to the Massachusetts Memorial Hospitals and chief of the Hypertension Clinic. A past president of the Massachusetts Heart Association, Dr. Wilkins is now president of the American Heart Association.

R. C. S. Young
Atlanta, Georgia

*Sponsored by
Georgia
Academy of
General Practice*



R.C.S. YOUNG, Atlanta, is one of the three panel speakers appearing before the G.P. Day General Session, Monday, April 28. In this forum "The Three Faces of Adam," Dr. Young will discuss "The Face He Shows His Community."

Dr. Young was born in Edinburgh, Scotland and came to America shortly following World War I. He

graduated from Mercer University in Macon where he later received an honorary doctorate degree in 1933. For two years Dr. Young taught languages at Mercer after which he accepted a position with the First Baptist Church at Columbus, as business manager and educational director before entering the active ministry. In 1941 he became professor of moral philosophy at the Atlanta Division of the University of Georgia. While holding this position, he served during World War II as a dollar-a-year man with the Treasury Department of the United States, lecturing in the interest of war savings bonds. He is a past president of the Chamber of Commerce of Newnan, past president of the Newnan Rotary Club and is now director of Admissions of the Atlanta Division of the University of Georgia.

Dr. Young is a well known lecturer to civic, business, industrial, educational, religious, and student groups throughout the U.S. and Canada.

The Program

SUNDAY AFTERNOON, APRIL 27

Social Events

(Not a part of Official Program)

Sunday Noon, April 27

NOTE: Make reservations in advance with chairman if possible.

12:00 Georgia Pediatric Society Luncheon and Business Meeting

Jefferson Davis Room, Hotel Lanier

Edwin R. Watson, Macon, Chairman

2:00 Pediatrics, Orthopedics and Radiology Joint Section

(ALL PHYSICIANS INVITED)

Macon Auditorium

PRESIDING

Edwin R. Watson, Macon

2:00 COR TRIATRIATUM (A CORRECTIBLE CONGENITAL HEART DISORDER)

James V. Rogers, Emory University

2:20 ALLERGIC PROBLEMS IN EARLY INFANCY

Victor C. Vaughan, III, Augusta

2:40 INJURIES OF THE ELBOW IN CHILDREN

John Meier, Albany

3:15 MEDICAL PROBLEMS OF THE NEWBORN AND INFANCY

William A. Silverman, New York City

3:45 ROENTGEN EVALUATION OF CRANIAL ASYMETRY IN INFANTS

John A. Campbell, Indianapolis, Indiana

4:15 THE MANAGEMENT OF CONGENITAL DEFORMITIES IN INFANCY

Frank H. Stelling, Greenville, South Carolina

4:45 DISCUSSION PERIOD

2:00 Psychiatric and General Practice Joint Section

(ALL PHYSICIANS INVITED)

Kilowatt Room, 667 Cherry Street

PRESIDING

J. R. Shannon Mays, Macon

2:00 PSYCHIATRIC INTENSIVE TREATMENT PROGRAM IN GENERAL HOSPITALS

Trawick Stubbs, Atlanta

2:30 HOW TO PREPARE A PATIENT FOR REFERRAL TO A PSYCHIATRIST

William Rottersman, Atlanta

3:00 SCHOOL PHOBIA—ITS CAUSES AND TREATMENT. A CLINICAL CASE PRESENTATION BY THE ATLANTA CHILD GUIDANCE CLINIC

George H. Preston, Melvin Drucker, Ph.D., and Margaret Graham, M.S.S., Atlanta

3:40 INTERMISSION

3:45 EARLY SIGNS AND SYMPTOMS OF BRAIN TUMOR

Robert Clark, Macon

4:15 USES AND ABUSES OF TRANQUILIZING DRUGS

Thomas M. Hall, Macon

4:45 MAG Delegates Registration

Walter Little Room, Hotel Dempsey

5:00 House of Delegates Meeting

Walter Little Room, Hotel Dempsey

PRESIDING

Thomas W. Goodwin, Augusta,

Speaker of the House

5:00 ORDER OF BUSINESS (see Delegate's Handbook)

YOUR AMA IN 1958

Gunnar Gundersen, LaCrosse, Wisconsin,

President-Elect, American Medical

Association

REPORT OF PRESIDENT WOMAN'S AUXILIARY TO MAG

Mrs. John L. Elliott, Savannah

Social Events

(Not a part of Official Program)

Sunday Night, April 27

NOTE: Make reservations in advance with chairman if possible.

7:00-8:00 House of Delegates and Exhibitors Social Hour (Wives invited)

Walter Little A and B Room, Hotel Dempsey

7:00 Georgia Psychiatric Association Dinner Pinebrook Inn, (Near Country Club—Highway 41)

J. R. Shannon Mays, Macon, Chairman
Georgia Radiological Society, Georgia Orthopedic Society and Georgia Pediatric Society
Joint Dinner
Elks Club

John Paul Jones, Macon, Chairman

MONDAY MORNING, APRIL 28

8:00 MAG Reference Committees

8:00 REFERENCE COMMITTEE NO. 1

Room to be announced, Hotel Dempsey

8:00 REFERENCE COMMITTEE NO. 2

Room to be announced, Hotel Dempsey

8:00 REFERENCE COMMITTEE NO. 3

Room to be announced, Hotel Dempsey

8:30 General Session (G. P. Day)

(ALL PHYSICIANS INVITED)

Macon Auditorium

PRESIDING

Frank Houser, Macon

- 8:45 **INVOCATION**
Dr. King Vivion, Pastor, Vineville Methodist Church, Macon
- 8:50 **WELCOME**
Hon. B. F. Merritt, Jr., Mayor of Macon
Henry H. Tift, Macon, President, Bibb County Medical Society
- 9:00 **THE FIRST DAY OF LIFE**
William A. Silverman, New York City
- 9:30 **LONG TERM RESULTS OF TUBERCULOSIS CHEMOTHERAPY**
Paul T. Chapman, Detroit, Michigan
- 10:00 **PROLONGED LABOR**
William F. Mengert, Chicago, Illinois
- 10:30 **INTERMISSION—VIEW EXHIBITS**
- 10:45 **THE HIP FROM INFANCY TO OLD AGE**
Frank Stelling, Greenville, South Carolina
- 11:15 **THE TREATMENT OF CONGESTIVE HEART FAILURE**
Robert W. Wilkins, Boston, Massachusetts
- 9:00 Georgia Radiological Society Business Meeting and Film Reading Session**
Pine Room, Hotel Dempsey
PRESIDING
Robert M. Tankesley, Atlanta, President
- 9:00 **BUSINESS MEETING**
- 10:00 **FILM READING SESSION**
- 11:45 MAG General Business Session**
(ALL MAG AND AUXILIARY MEMBERS and GUESTS INVITED)
Macon Auditorium
PRESIDING
W. Bruce Schaefer, Toccoa, President, Medical Association of Georgia
- 11:45 **PRESENTATION BY SCHERING CORPORATION**
Mr. Gabriel R. McClure, Decatur
- 11:50 **PRESIDING**
T. A. Peterson, Savannah, First Vice-President
PRESIDENT'S ADDRESS
W. Bruce Schaefer, Toccoa, President
PRESIDING
NOMINATION OF OFFICERS
(*Announcement of Tellers Committee*)
President-Elect
First Vice President
Second Vice President
2 AMA Delegates (Term beginning January 1, 1959)
2 AMA Alternate Delegates (Term beginning January 1, 1959)
Councilor, First District
Vice-Councilor, First District
Councilor, Second District
Vice-Councilor, Second District

Councilor, Third District
Vice-Councilor, Third District
Councilor, Fourth District
Vice-Councilor, Fourth District

Social Events

(Not a part of Official Program)

Monday Noon, April 28

NOTE: Make reservations in advance with chairman if possible.

- 1:00 Georgia Chapter, American College of Surgeons Luncheon
Juhan Room, Elks Club, 841 Mulberry Street
Calder B. Clay, Jr., Macon, Chairman
- 1:00 Georgia Society of Ophthalmology and Otolaryngology Luncheon
Hotel Dempsey
E. P. Calhoun, Jr., Atlanta, Chairman
- 1:00 Georgia Radiological Society Luncheon
Walter Little A and B Room, Hotel Dempsey
W. H. Somers, Macon, Chairman
- 1:00 Georgia Society of Anesthesiologists Luncheon
Location to be announced
Elmer Lee Fry, Macon, Chairman

MONDAY AFTERNOON, APRIL 28

- 2:30 MAG Reference Committees**
- 2:30 REFERENCE COMMITTEE NO. 4
Room to be announced, Hotel Dempsey
- 2:30 REFERENCE COMMITTEE NO. 5
Room to be announced, Hotel Dempsey
- 2:30 Orthopedics, Surgery, Anesthesiology, Pathology and Industrial Surgery Joint Section**
(ALL PHYSICIANS INVITED)
Macon Auditorium
PRESIDING
Charles H. Richardson, Jr., Macon
- 2:30 **PANEL: CASE REPORT OF SEVERE INDUSTRIAL ACCIDENT INVOLVING MULTIPLE INJURIES AND SHOCK WITH ACUTE RENAL FAILURE**
Charles L. Ridley, Jr., Macon
PANEL PARTICIPANTS DISCUSSING SOME PHASE OF ABOVE CASE AS RELATED TO THEIR SPECIALTY
- 2:45 **CLOSED EMERGENCIES OF THE MUSCULOSKELETAL SYSTEM**
Robert P. Kelly, Emory University (Orthopedics)
- 3:15 **ANESTHESIA FOR SURGERY OF TRAUMA**
Joseph F. Artusio, Jr., New York City (Anesthesiology)
- 3:45 **BLOOD REPLACEMENT AND TRANSFUSION REACTIONS**
Donald W. Smith and James Griffiths, Miami, Florida (Pathology)

4:15 SHOCK IN SEVERE INDUSTRIAL INJURIES
AND WAR WOUNDS

James E. Thompson, New York City
(General Surgery)

4:45 QUESTIONS FROM THE FLOOR

**2:30 Medicine, Neurosurgery and EENT
Joint Section**

(ALL PHYSICIANS INVITED)

Kilowatt Room, 667 Cherry Street

PRESIDING

Haywood N. Hill, Atlanta

2:30 THE VALUE OF THE OCULAR FUNDI IN
HYPERTENSION

M. Hobson Rice, Atlanta

2:45 THE DRUG TREATMENT OF HYPERTENSION

Robert W. Wilkins, Boston, Massachusetts

3:15 THE SURGICAL TREATMENT OF HYPERTEN-
SION

George P. Whitelaw, Boston, Massachusetts

3:45 INTERMISSION—VIEW EXHIBITS

PRESIDING

Phinzy Calhoun, Jr., Atlanta

4:00 CICATRICAL STENOSIS OF THE LARYNX

Truett Bennett, Atlanta

4:15 THE USE OF ACTH AND STEROIDS IN THE
TREATMENT OF ULCERATIVE COLITIS AND
REGIONAL ILEITIS

Spalding Schroder, Atlanta

4:30 THIRTY YEARS STUDY OF SLUDER'S HEAD-
ACHES AND ALLIED NEURALGIAS SEEN IN
PRIVATE PRACTICE

Wes C. Thomas, Brunswick

4:45 INTERNAL MAMMARY LIGATION IN THE
TREATMENT OF ANGINA PECTORIS

William A. Hopkins, M. Bedford Davis, and
William C. Wansker, Atlanta

*Visit the exhibits and register with the
exhibitors—these are the people who help
finance your annual session.*

2:30 Radiology Section

Pine Room, Hotel Dempsey

PRESIDING

Robert M. Tankesley, Atlanta, President

2:30 RADIOLOGY OF PATIENT DUCTUS

John A. Campbell, Indianapolis, Indiana

3:00 THE ROLE OF RADIATION THERAPY IN CAR-
CINOMA OF THE LARYNX

John Dillon, Augusta

3:30 RADIATION EXPOSURE TO PATIENT AND
PHYSICIAN DURING DIAGNOSTIC X-RAY
PROCEDURES

H. S. Weems, Emory University

4:00 THE PLACE OF CONVENTIONAL AND SUPER-
VOLTAGE THERAPY IN THE MANAGEMENT
OF MALIGNANT DISEASE

Bryan L. Redd, Jr., Emory University

4:30 DISCUSSION PERIOD

MONDAY EVENING, APRIL 28

Social Events

(Not a part of Official Program)

Monday Evening, April 28

*NOTE: Make reservations in advance with chairman if
possible*

EMORY UNIVERSITY SCHOOL OF MEDI-
CINE ALUMNI

Time and place to be announced

6:30 MEDICAL COLLEGE OF GEORGIA ALUMNI
SOCIAL HOUR AND BANQUET
Hotel Dempsey

**8:15 General Session Reconvened
(G. P. Day)**

(ALL MAG AND AUXILIARY MEMBERS AND
GUESTS INVITED)

Macon Auditorium

PRESIDING

Fred H. Simonton, Chickamauga, President,
Georgia Academy of General Practice

8:15 THREE FACES OF ADAM

Mrs. W. Bruce Schaefer, Toccoa, Wife of
the President of MAG

Mr. Jim Cherry, Decatur, Superintendent,
DeKalb County School System

Dr. R. C. S. (Scotty) Young, Guest Speaker,
General Motors Corporation

TUESDAY MORNING, APRIL 29

Social Events

(Not a part of Official Program)

Tuesday Morning, April 29

*NOTE: Make reservation in advance with chairman if
possible.*

8:00 Georgia Diabetes Association Breakfast
Hotel Dempsey

Harold Ferris, Atlanta, Chairman

**9:00 Medicine, Chest, Diabetes and EENT
Joint Section**

(ALL PHYSICIANS INVITED)

Macon Auditorium

PRESIDING

Harold Ferris, Atlanta

9:00 THE MODERN INTERPRETATION OF DIA-
BETIC RETINOPATHY

P. Thomas Manchester, Jr., Atlanta

- 9:15 URINARY INFECTIONS IN DIABETES
George T. Harrell, Jr., Gainesville, Florida
- 10:00 ISLET CELL TUMOR OF THE PANCREAS
WITH CASE REPORT
George R. Dillinger, C. H. Watt, Jr., and
W. Vance Watt, Thomasville
- 10:15 INTERMISSION—VIEW EXHIBITS
PRESIDING
Samuel E. Patton, Macon
- 10:30 ACUTE PULMONARY SUPPURATION AND
TUBERCULOSIS
Paul Chapman, Detroit, Michigan
- 11:15 ALLERGY TO INSECT VENOM
Carl Jones, Atlanta

**9:00 Obstetrics and Gynecology, General
Practice and Anesthesiology
Joint Section**

(ALL PHYSICIANS INVITED)

Kilowatt Room, 667 Cherry Street

PRESIDING:

Jule C. Neal, Jr., Macon

- 9:00 THE CHILD AS A GYNECOLOGICAL PATIENT
Dan Kahle, Atlanta
DISCUSSANT

J. B. Traylor, Athens

- 9:30 THE USE OF A NEW SALURETIC AGENT
IN THE TREATMENT OF OBSTETRICAL AND
GYNECOLOGICAL DISORDERS

William E. Barfield, Augusta

DISCUSSANT

W. G. Thwaite, Columbus

- 10:00 STRESS INCONTINENCE OF URINE

William F. Mengert, Chicago, Illinois

- 10:30 INTERMISSION—VIEW EXHIBITS

- 11:00 FURAZOLIDONE AND NIFUROXINE: A NEW
DRUG FOR THE TREATMENT OF VAGINITIS

L. R. Lanier, Jr., Savannah

DISCUSSANT

C. W. Coolidge, Atlanta

- 11:30 ANESTHESIA IN UNCOMPLICATED AND
COMPLICATED OBSTETRICS

Robert Reynolds, Boston, Massachusetts

**9:00 Georgia Association of Pathologists
Business Meeting**

Pine Room, Hotel Dempsey

PRESIDING

E. L. Bishop, Atlanta

11:30 General Session Lectureships

(ALL PHYSICIANS INVITED)

Macon Auditorium

- 11:30 JONTE EQUEN MEMORIAL LECTURESHIP
PRESIDING

Murdock Equen, Atlanta

- 11:30 ATOMIC MEDICINE—USE OF RADIOISO-
TOPES IN MEDICINE AND SURGERY

James R. Maxfield, Jr., Dallas, Texas

- 12:15 McRAE MEMORIAL LECTURESHIP
PRESIDING

Floyd McRae, Atlanta

Title to be announced

TUESDAY AFTERNOON, APRIL 29

Social Events

(Not a part of Official Program)

Tuesday Afternoon, April 29

*NOTE: Make reservations in advance with chairman
if possible.*

- 12:30 Georgia State Obstetrical & Gynecological
Society and Georgia Academy of General
Practice Luncheon

Elks Club, 841 Mulberry Street

T. E. Rogers, Jr., Macon, Co-Chairman
(Ob-Gyn)

Lynn Hicks, Macon, Co-Chairman (G.P.)

- 1:00 Georgia Association of Pathologists

Pine Room, Hotel Dempsey

Leonard H. Campbell, Macon, Chairman

- 1:00 Georgia Chapter American College of Chest
Physicians and Georgia Trudeau Society
S & S Cafeteria, Third Street (Upstairs)

Samuel E. Patton, Macon, Chairman

**2:30 Obstetrics and Gynecology, General
Practice, and Pathology
Joint Section**

(ALL PHYSICIANS INVITED)

Macon Auditorium

PRESIDING

Leonard H. Campbell, Macon

- 2:30 ERYTHROBLASTOSIS

James Griffiths, Miami, Florida

Please check the Official Bulletin Board

for details of other Social Events

which may not have been listed here

3:00 PANEL: CASE HISTORIES

PANELISTS

William F. Mengert, Chicago, Illinois
James Griffiths, Miami, Florida
Charles Mulherin, Augusta
E. V. Hastings, Augusta
Fred H. Simonton, Chickamauga

4:30 Georgia State Obstetrical and Gynecological Society Business Meeting

Macon Auditorium

PRESIDING

Charles Mulherin, Augusta, President

2:30 Surgery Section

(ALL PHYSICIANS INVITED)

Kilowatt Room, 667 Cherry Street

PRESIDING

Thomas Harrold, Macon

2:30 MULTIPLE HEMANGIOMAS OF THE JEJUNUM AS A CAUSE OF MASSIVE GASTROINTESTINAL BLEEDING—REPORT OF A CASE

Albert L. Evans, Olin S. Cofer and Hugh H. Gregory, Atlanta

2:45 SURGERY IN THE TREATMENT OF PEPTIC ULCER

James E. Thompson, New York City

3:15 EXPERIENCES WITH THE USE OF SMALL AND LARGE BOWEL TO REPLACE THE THORACIC ESOPHAGUS

Osler A. Abbott and William H. Sewell, Jr., Emory University

3:30 PRESENT DAY MANAGEMENT OF TETANUS WITH CASE REPORT

John T. DuPree and Hugh K. Sealy, Macon

3:45 DIAGNOSTIC AND THERAPEUTIC NERVE BLOCKS

George P. Whitelaw, Boston, Massachusetts

4:10 THE PRESENT STATUS OF INTRACARDIAC SURGERY

Robert G. Ellison, Augusta

4:30 RECENT ADVANCES IN THE SURGICAL TREATMENT OF SEGMENTAL ARTERIOSCLEROTIC PERIPHERAL ARTERIAL LESIONS

Milton F. Bryant, Atlanta

4:45 PRESENT STATUS OF ARTERIAL GRAFTING

J. Harold Harrison, Atlanta

WEDNESDAY MORNING, APRIL 30

9:00 House of Delegates Second Meeting (Recessed)

Macon Auditorium

PRESIDING

Thomas W. Goodwin, Augusta,
Speaker of the House

ORDER OF BUSINESS

(See Delegates Handbook)

11:30 MAG General Business Session

(ALL MAG AUXILIARY MEMBERS AND GUESTS INVITED)

Macon Auditorium

PRESIDING

W. Bruce Schaefer, Toccoa, President,
Medical Association of Georgia

PRESENTATION OF 50 YEAR CERTIFICATES

W. Bruce Schaefer, Toccoa, President

PRESENTATION OF HARDEMAN AWARD

Mr. Lamartine C. Hardman, Commerce

PRESENTATION OF MAG CERTIFICATES OF APPRECIATION

Chris J. McLoughlin, Atlanta,
Secretary-Treasurer

PRESENTATION OF PRESIDENT'S KEY

PRESENTATION OF SCIENTIFIC EXHIBIT AWARD

Ted F. Leigh, Atlanta, Chairman, Scientific
Awards Committee

PRESENTATION OF MAG DISTINGUISHED SERVICE AWARD

W. Bruce Schaefer, Toccoa, President

PRESENTATION OF GOLF AWARDS

SELECTION OF 1959 ANNUAL MEETING SITE

ANNOUNCEMENT OF MAG ELECTION RESULTS

Chairman, Tellers Committee

INSTALLATION OF 1958-59 OFFICERS

ADJOURNMENT OF *104TH ANNUAL SESSION

WEDNESDAY AFTERNOON, APRIL 30

1:00 New 1958-59 Council Organizational Meeting

Macon Auditorium

BE SURE TO VOTE EARLY!

Check official bulletin board

for rules and location of ballot box.

Woman's Auxiliary to the Medical Association of Georgia 33rd Annual Meeting

April 27-30, 1958 — Macon

President's Invitation

MEMBERS OF THE WOMAN'S AUXILIARY to the Medical Association of Georgia, it is my pleasure and privilege to extend to each of you a cordial invitation to attend your Annual Convention—the time appointed for renewing friendships, reviewing accomplishments, and lifting sights to higher levels of service.

The program has been planned with these aims in mind and bids you come and participate to make it complete.

Sincerely,

Mrs. John L. Elliott

President, Woman's Auxiliary to the
Medical Association of Georgia



Welcome to Macon

IN BEHALF OF the Woman's Auxiliary to the Bibb County Medical Society, it is a sincere pleasure to welcome you to the 33rd Annual Convention of the Woman's Auxiliary to the Medical Association of Georgia, to be held April 27-30.

Entertainment has been planned for your enjoyment. Allow us the privilege of assisting you at any time to make your visit in Macon a happy one.

Sincerely,

Mrs. John I. Hall

President, Woman's Auxiliary to the
Bibb County Medical Society

SUNDAY, APRIL 27

**11:00 Registration
to
5:00**

**1:00 Pre-Convention Executive Board
Meeting—Dutch Luncheon**
(For 1957-58 officers, state chairmen,
district managers, county presidents,
county presidents-elect, past state presi-
dents, and councilor to SMA Auxiliary)
Mirror Room, Hotel Dempsey

PRESIDING

Mrs. John L. Elliott, Savannah

INVOCATION

Mrs. William R. Dancy, Savannah

PLEDGE OF LOYALTY

Mrs. Samuel A. Anderson, Atlanta

BUSINESS SESSION

**5:00 Joint Meeting—MAG House of
Delegates and Woman's Auxiliary**
Walter Little Room, Hotel Dempsey

PRESIDING

Thomas W. Goodwin, Augusta,
Speaker of the House

ORDER OF BUSINESS (*See MAG Delegate's Handbook*)

YOUR AMA IN 1958

Gunnar Gunderson, LaCrosse, Wisconsin,
President-Elect, AMA

AUXILIARY PRESIDENT'S REPORT

Mrs. John L. Elliott, Savannah

MONDAY, APRIL 28

8:30 Registration

to *Mezzanine, Hotel Dempsey*
3:30

9:30 General Meeting

Civic Room, Hotel Dempsey

CALL TO ORDER

Mrs. John L. Elliott, Savannah, President

INVOCATION

Dr. King Vivion, Pastor, Vineville Methodist
Church, Macon

PLEDGE OF LOYALTY

Mrs. Eustace Allen, Atlanta

WELCOME

Mrs. John I. Hall, Macon

RESPONSE

Mrs. E. L. Askren, Atlanta

INTRODUCTION OF HONOR GUESTS AND
PAST STATE PRESIDENTS

Mrs. W. G. Elliott, Cuthbert

PRESENTATION OF CONVENTION PLANS

Mrs. J. R. S. Mays, Macon,
General Chairman

INTRODUCTION OF PAGES FOR THE DAY

Mrs. Calder Clay, Jr., Macon

REPORT OF ADVISORY COMMITTEE TO THE
WOMAN'S AUXILIARY TO MAG

Virgil Williams, M.D., Griffin, Chairman

GREETINGS

W. Bruce Schaefer, M.D., Toccoa,
President, MAG

INTRODUCTION OF GUEST SPEAKER

Mrs. W. Bruce Schaefer, Toccoa

THE PHYSICIAN'S WIFE-GENERALIST

Mrs. Aaron Margulis, Chairman, Mental
Health, Woman's Auxiliary to AMA

Business Session

CONVENTION RULES OF ORDER

Mrs. Lee Howard, Savannah,
Parliamentarian

ROLL CALL

MINUTES

Mrs. Neal F. Yeomans, Waycross,
Secretary

Reports

PRESIDENT

Mrs. John L. Elliott, Savannah

PRESIDENT ELECT

Mrs. Luther H. Wolff, Columbus

TREASURER (*Including report of Auditor*)

Mrs. Hayward S. Phillips, Augusta

ADDENDUM REPORTS

COMPLETE REPORTS (*See 1957-58 Annual
Report*)

NEW BUSINESS

RECOMMENDATIONS OF EXECUTIVE BOARD

REVISIONS

Mrs. Leo Smith, Waycross, Chairman

REPORT OF CREDENTIALS COMMITTEE

Mrs. Charles Rumble, Chairman, Macon

MEMORIAL SERVICE

Mrs. J. Lon King, Macon

ANNOUNCEMENTS

ADJOURNMENT

12:30 Dutch Luncheon

(*For Past Presidents of Woman's
Auxiliary to MAG*)

Sidney Lanier Cottage

PRESIDING

Mrs. Walker L. Curtis, College Park,
Immediate Past President

12:30 Dutch Luncheon

(*For county presidents, presidents-elect,
district managers, district managers-
elect, state chairmen and officers*)

Elk's Club

PRESIDING

Mrs. Luther H. Wolff, President-elect

3:00 Tour of Macon

to and

5:00 Tea

Home of Mrs. W. W. Baxley

RECEIVING AT TEA

Mrs. John I. Hall, President, Bibb County
Auxiliary

Mrs. John L. Elliott, President, Savannah
Auxiliary to MAG

Mrs. Aaron Margulis, Santa Fe, New
Mexico, Chairman, Mental Health,
Woman's Auxiliary to AMA

Mrs. Luther H. Wolff, Columbus, President-
elect, Woman's Auxiliary to MAG

Mrs. Bruce Schaefer, Wife of MAG
President

Mrs. Lee Howard, Wife of MAG President-
elect

Mrs. J. R. S. Mays, General Chairman of
Convention
Mrs. Thomas H. Williams, Co-chairman
of Convention
Mrs. Walker L. Curtis, President of Woman's
Auxiliary to Southern Medical
Association
Mrs. W. W. Baxley, Chairman of Tea

MONDAY NIGHT, APRIL 28

8:30 G. P. Day General Session (Joint Meeting with MAG) (Auxiliary members and guests invited)

Macon Auditorium

PRESIDING

Fred H. Simonton, Chickamauga, President,
Georgia Academy of General Practice

8:15 Three Faces of Adam

Mrs. Bruce Schaefer, Toccoa
Mr. Jim Cherry, Decatur, Superintendent,
DeKalb County School System
Dr. R. C. S. Young, Guest Speaker,
General Motors Corporation

TUESDAY, APRIL 29

9:00 Registration

Mezzanine, Hotel Dempsey

to
12:30

9:30 General Meeting

Civic Room, Hotel Dempsey

CALL TO ORDER

Mrs. John L. Elliott, Savannah, President

INVOCATION

The Rev. T. Stuart Matthews, Rector,
St. Paul's Episcopal Church

PLEDGE OF LOYALTY

Mrs. Ralph Fowler, Marietta

INTRODUCTION OF PAGES FOR THE DAY

Mrs. Calder Clay, Jr., Chairman

ANNOUNCEMENT OF CONVENTION PLANS

Mrs. J. R. S. Mays, General Chairman

PREMIERE OF MOVIE—*Georgia Auxiliaries in Action*

NARRATOR

Mrs. E. M. Dunstan, Atlanta, Chairman,
Achievement Award

INTRODUCTION OF GUEST SPEAKER

Mrs. Stephen L. Brown, Councilor to
Woman's Auxiliary to SMA

ADDRESS

Mrs. Walker L. Curtis, College Park,
President, Woman's Auxiliary to SMA

THE MEDICAL ASSOCIATION AND ITS AUXILIARY

Lee Howard, M.D., Savannah, President-elect, MAG

Business Session

ROLL CALL AND MINUTES

Mrs. Neal F. Yeomans

REPORT OF REVISIONS COMMITTEE

Mrs. Leo Smith, Waycross, Chairman

REPORT OF BUDGET AND FINANCE COMMITTEE

Mrs. Ralph H. Chaney, Augusta, Chairman

REPORT OF RESOLUTIONS COMMITTEE

Mrs. L. H. Griffin, Claxton, Chairman

REPORT OF CREDENTIALS COMMITTEE

Mrs. Thomas L. Ross, Jr., Macon,
Co-chairman

REPORT OF COURTESY COMMITTEE

Mrs. W. J. Gower, Thomaston, Chairman

REPORT OF AWARDS COMMITTEES

ACHIEVEMENT

Mrs. E. M. Dunstan, Decatur, Chairman

DOCTOR'S DAY

Mrs. L. G. Cacchioli, Hartwell, Chairman

MRS. J. BONAR WHITE SCRAPBOOK

Mrs. W. P. Rhyne, Albany, Chairman

MARIE S. BURNS SAFETY

Mrs. David D. Merren, Albany, Chairman

BRAWNER TROPHY FOR GENERAL EXCELLENCE

Mrs. Walker L. Curtis, College Park,
Chairman

REPORT OF NOMINATING COMMITTEE

Mrs. Leo Smith, Waycross, Chairman

ELECTION OF OFFICERS

INSTALLATION OF OFFICERS

Mrs. Shelley C. Davis, Atlanta

PRESENTATION OF PRESIDENT'S PIN

Mrs. John L. Elliott, Retiring President

ANNOUNCEMENT OF 1958-59 CHAIRMAN

Mrs. Luther H. Wolff, Columbus, President

ANNOUNCEMENTS

ADJOURNMENT

1:00 Luncheon (For All Auxiliary Convention Members)

Idle Hour Country Club

PRESIDING

Mrs. John L. Elliott, Retiring President

INVOCATION

Mrs. L. W. Williams, Savannah

**6:30 Bibb County Medical Society
Social Hour**
(Sponsored by Security Life Insurance
Company)
*American Legion Post No. 3,
2020 Riverside Drive*

**7:30 President's Banquet, Medical
Association of Georgia**
*American Legion Post No. 3,
2020 Riverside Drive*

8:00 Music and Floor Show
to *Buddy Bair Orchestra*
12:00

WEDNESDAY, APRIL 30

**9:00 Post Convention Executive Board
Meeting—Dutch Breakfast**
(For 1958-59 officers, chairmen, district
managers, county presidents, county
presidents-elect, past state presidents,
and councilor to SMA Auxiliary)

PRESIDING

Mrs. Luther H. Wolff, President
Mirror Room, Hotel Dempsey

11:30 Joint General Business Session
(All MAG and Auxiliary Members and
Guests)
Main Floor, Macon Auditorium
PRESIDING

W. Bruce Schaefer, M.D., Toccoa,
President, MAG

PRESENTATION OF 50 YEAR CERTIFICATES
W. Bruce Schaefer, M.D., Toccoa

PRESENTATION OF HARDEMAN AWARD

Mr. Lamartine C. Hardman, Commerce

PRESENTATION OF CERTIFICATES OF AP-
PRECIATION

Chris J. McLoughlin, M.D., Atlanta,
Secretary-Treasurer, MAG

PRESENTATION OF PRESIDENT'S KEY

PRESENTATION OF SCIENTIFIC EXHIBIT
AWARD

Ted F. Leigh, M.D., Atlanta, Scientific
Exhibit Awards Committee

PRESENTATION OF MAG DISTINGUISHED
SERVICE AWARD

W. Bruce Schaefer, M.D., Toccoa, President

PRESENTATION OF GOLF AWARDS

SELECTION OF 1959 MEETING SITE

ANNOUNCEMENT OF ELECTION RETURNS

Chairman, Tellers Committee

INSTALLATION OF 1958-59 MAG OFFICERS

ADJOURNMENT OF 104TH ANNUAL
SESSION

NOTE: Tickets are available at the Registration Desk for Auxiliary Convention Members for (1) Monday Luncheons, (2) Monday Tea, (3) Tuesday Luncheon.

Rules to Govern the Convention

1. The voting body of the convention shall consist of the members of the Executive Board of the Woman's Auxiliary to the Medical Association of Georgia and the duly accredited delegates from the county auxiliaries. No one is entitled to vote until registered.
2. To gain recognition, a delegate is requested to rise, address the chair, give her name and the name of her auxiliary.
3. No delegate shall speak more than twice on the same subject, and is limited to two minutes each time.
4. Badges must be worn by members of the voting body during all general sessions of the convention.
5. Delegates' privileges are not transferable.
6. All motions shall be presented in writing to the Recording Secretary. They shall be signed by the persons making and seconding the motion.
7. All original motions on resolutions shall be made by submitting two copies, one to the Resolutions Committee and one to the Recording Secretary.
8. All persons appearing on the program must be seated near the platform when the session opens.

Whispering conversations greatly retard the business of the meeting. Order must be maintained at all times. Please be prompt. Meetings will begin promptly at the time announced.

ORGANIZATION

of the

Woman's Auxiliary to the Medical Association of Georgia

Officers, 1957-1958

President—Mrs. John L. Elliott.....Savannah
President-Elect—Mrs. Luther H. Wolff.....Columbus
First Vice-President—Mrs. Virgil Williams.....Griffin
Second Vice-President—Mrs. Remer Y. Clark.....Marietta
Third Vice-President—Mrs. W. P. Rhyne.....Albany
Corresponding Secretary—Mrs. John E. Porter.....Savannah
Recording Secretary—Mrs. Neal F. Yeomans.....Waycross
Treasurer—Mrs. Haywood S. Phillips.....Augusta
Historian—Mrs. Ted F. Leigh.....Atlanta
Parliamentarian—Mrs. Lee Howard.....Savannah

Advisory Committee

Dr. Virgil Williams, *Chairman*.....Griffin
Dr. W. Bruce Schaeffer, *ex officio*.....Toccoa
Dr. Walker L. Curtis.....College Park
Dr. Hal M. Davison.....Atlanta
Dr. Lee Howard, *ex officio*.....Savannah
Dr. John L. Elliott.....Savannah
Dr. W. G. Elliott.....Cuthbert

Standing Committee Chairmen

Achievement Award—Mrs. Edgar M. Dunstan.....Decatur
Brawner Trophy—Mrs. Walker L. Curtis.....College Park
Editorial—Mrs. Brit B. Gay, Jr.....Decatur
Organization—Mrs. Luther H. Wolff.....Columbus
By-Laws and Procedures Revisions—Mrs. Leo Smith.....Waycross
Archives—Mrs. A. Worth Hobby.....Atlanta
Bulletin—Mrs. T. E. Rogers, Jr.....Macon
Legislation—Mrs. E. P. Inglis.....Marietta
Program—Mrs. Virgil Williams.....Griffin
Safety—Mrs. David D. Merren.....Albany
American Medical Education Foundation—
Mrs. Ennis Waldemayer.....Americus
Civil Defense—Mrs. F. Kells Boland.....Atlanta
Mental Health—Mrs. Charles R. Smith.....Columbus
Public Relations—Mrs. W. J. Gower, Jr.....Thomaston
Scrapbook—Mrs. W. P. Rhyne.....Albany
Budget and Finance—Mrs. Ralph Chaney, Sr.....Augusta
Doctor's Day—Mrs. L. G. Cacchioli.....Hartwell
Recruitment—Mrs. Louie H. Griffin.....Claxton
Research in Romance of Medicine—Mrs. Joe J. Arrendale.....Cornelia
Student Loan Fund—Mrs. Milford B. Hatcher.....Macon
Today's Health—Mrs. Remer Y. Clark.....Marietta

Special Committee Chairman

State Handbook—Mrs. Ralph Fowler.....Marietta

District Managers

First—Mrs. Louie H. Griffin.....Claxton
Second—Mrs. Robert Quattlebaum.....Fort Gaines
Third—Mrs. Maurice Arnold.....Hawkinsville
Fourth—Mrs. Robert Edwin Dallas.....Thomaston
Fifth—Mrs. Howard Lee.....Decatur
Sixth—Mrs. James Baugh.....Milledgeville
Seventh—Mrs. Lebron Alexander.....Rossville
Eighth—Mrs. Byron Davis.....Valdosta
Ninth—Mrs. Arthur M. Hendrix.....Canton
Tenth—Mrs. Ralph Wenzel.....Social Circle

Councilor, Woman's Auxiliary to the Southern Medical Association

Mrs. Stephen W. Brown.....Augusta

County Auxiliary Presidents

Baldwin (Putnam)—Mrs. Zeb L. Burrell.....Milledgeville
Bibb (Crawford, Jones, Monroe, Twiggs, Walkinson)—
Mrs. John I. Hall.....Macon
Bulloch-Candler-Evans—Mrs. Hugh King.....Statesboro
Carroll-Douglas-Haralson—Mrs. Francis M. Parks.....Carrollton
Chatham (Bryan, Long, Liberty, Effingham, McIntosh)—
Mrs. A. H. Center.....Savannah
Chattahoochee-Gwinnett-Forsyth—Mrs. Dan A. Martin.....Lawrenceville
Chattooga—Mrs. Hugh A. Goodwin.....Summerville
Cherokee-Pickens—Mrs. E. A. Roper.....Jasper
Cobb—Mrs. E. A. Musarra.....Marietta
Coffee—Mrs. Sage Harper.....Douglas
Decatur-Seminole—Mrs. T. E. DuPree.....Bainbridge
DeKalb—Mrs. Chester W. Morse.....Decatur
Dougherty—Mrs. Charles D. Hollis.....Albany

Elbert-Franklin-Hart—Mrs. Carey Mickel.....Elberton
Fint (Crisp, Turner, Looeey)—Mrs. H. J. Williams.....Cordele
Floyd—Mrs. Sam Garner, Jr.....Rome
Fulton—Mrs. E. L. Askren, Jr.....Atlanta
Glynn—Mrs. C. B. Chandier.....Brunswick
Gordon—Mrs. J. LeRoy Rabb.....Calhoun
Habersham-Towns-White—Mrs. L. G. Hicks, Jr.....Clarkeville
Hall-Lumpkin—Mrs. Jesse L. Meeks.....Gainesville
Muscogee—Mrs. Harry Brill.....Columbus
Polk-Paulding—Mrs. Charles Smith.....Rockmart
Randolph-Terrell-Stewart-Quitman—Mrs. R. B. Martin.....Cuthbert
Richmond-Columbia—Mrs. William O. White.....Augusta
South Georgia (Lowndes, Lanier, Berrien, Cook, Clinch)—
Mrs. Fred C. Smith.....Valdosta

Southwest Georgia (Calhoun, Early, Miller, Baker, Clay)—
Mrs. Jack Standifer.....Blakely
Spalding-Butts-Lamar-Henry-Pike—Mrs. Jack L. Austin.....Griffin
Sumter-Schley-Macon-Marion—Mrs. Ennis W. Waldemayer.....Americus
Thomas-Brooks—Mrs. C. C. Shipp.....Thomasville
Tift—Mrs. Robley Smith.....Tifton
Troup—Mrs. George Fisher.....Franklin
Ocmulgee Medical Society (Bleckley, Dodge, Pulaski, Wilcox)—
Mrs. W. E. Coleman.....Hawkinsville
Upson—Mrs. William Pruitt Woodall.....Thomaston
Walker-Catoosa-Dade—Mrs. Thomas Alsobrook.....Rossville
Ware (Bacon, Brantley, Camden, Charlton, Jeff Davis, Pierce)—
Mrs. Ivey Jacobs.....Waycross
Washington—Mrs. F. T. McElreath.....Tennille
Whitfield-Murray—Mrs. George S. Kerr.....Dalton
Worth—Mrs. W. P. Stoner.....Sylvester

Past President and Conventions

Honorary Presidents for Life
Mrs. James N. Brawner, Sr., Atlanta
Mrs. Eustace A. Allen, Atlanta

1924—Augusta (Organization)—Mrs. C. W. Roberts, Atlanta,
Temporary Chairman
1925—Atlanta—Mrs. James N. Brawner, Sr., Atlanta
1926—Albany—Mrs. William H. Myers, Savannah
1928—Savannah—Mrs. Paul Holiday (Mrs. J. C. Moore, Gaffney, S. C.)
1929—Macon—Mrs. Charles C. Hinton, Macon
1930—Augusta—Mrs. Marion T. Benson, Atlanta
1931—Macon—Mrs. Charles C. Harrold, Macon
1932—Savannah—Mrs. Ralston Lattimore, Savannah
1933—Macon—Mrs. S. T. R. Revell, Louisville
1934—Augusta—Mrs. J. Bomar White, Atlanta (Deceased)
1935—Atlanta—Mrs. J. E. Penland, Waycross
1936—Savannah—Mrs. Ernest R. Harris, Winder
1937—Macon—Mrs. W. R. Dancy, Savannah
1938—Augusta—Mrs. Ralph Chaney, Augusta
1939—Atlanta—Mrs. Warren A. Coleman, Eastman
1940—Savannah—Mrs. Eustace A. Allen, Atlanta
1941—Macon—Mrs. H. G. Bannister, Ila
1942—Augusta—Mrs. Lee Howard, Savannah
1943—Atlanta—Mrs. J. Lon King, Macon
1944—Savannah—Mrs. Olin S. Cofer, Atlanta
1945—No convention
1946—Macon—Mrs. W. T. Randolph, Winder
1947—Augusta—Mrs. W. Bruce Schaefer, Toccoa
1948—Atlanta—Mrs. W. G. Elliott, Cuthbert
1949—Savannah—Mrs. S. A. Anderson, Atlanta
1950—Macon—Mrs. J. Harry Rogers, Atlanta
1951—Augusta—Mrs. Lehman W. Williams, Savannah
1952—Atlanta—Mrs. J. R. S. Mays, Macon
1953—Savannah—Mrs. Ralph Fowler, Marietta
1954—Macon—Mrs. Leo Smith, Waycross
1955—Augusta—Mrs. Shelley C. Davis, Atlanta
1956—Atlanta—Mrs. Robert C. Major, Augusta
1957—Savannah—Mrs. Walker L. Curtis, College Park

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May we never be hasty in judgment, and always generous. Let us take time for all things; make us to grow calm, serene, gentle.

Teach us to put into action our better impulses, straightforward and unafraid.

Grant that we may realize it is the little things that create differences; that in the big things of life we are one.

And may we strive to reach and to know the great common woman's heart of us all, and, O, Lord God, let us not forget to be kind."

"Eh? Oh, I never go!"

*Says Dr. J.M. Smart, H. & B.D.**

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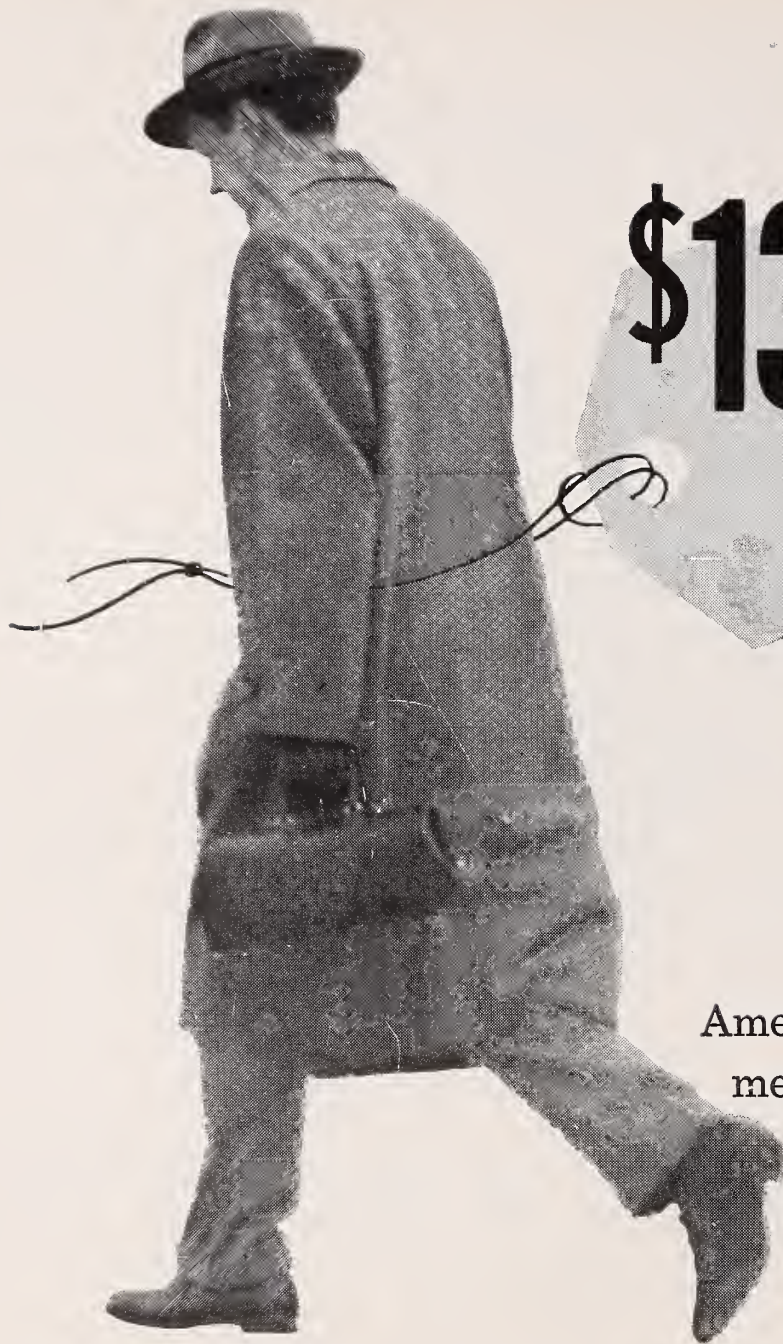


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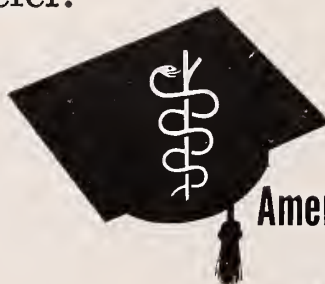
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COVER

This month's cover honors the opening of the new Grady Memorial Hospital. The dramatic white figure shown here silhouetted against black marble is one of the two sculptured reliefs guarding the main entrance of the hospital.

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MALIGNANT TUMORS OF THE THYROID GLAND

A statistical study of 124 cases is reported. The value of close cooperation between the surgeon and pathologist is emphasized.

JOHN E. SKANDALAKIS, M.D.; EDGAR O'CONNOR RAND, M.D.; and
DAVID HENRY POER, M.D., Atlanta, Ga.

CARCINOMA OF THE thyroid gland is one of the most controversial subjects today in medicine. Clinical diagnosis, pathological diagnosis, surgical, and other therapy are subjects which need careful study. Because of these problems, the interest of the internists and surgeons has been increased during the last 30 years, and marked progress has been made in the study of malignant conditions of the thyroid gland. Reports of many studies represent efforts of the medical profession to obtain better knowledge and better management of this clinical entity.

The purpose of this paper is to summarize and analyze 124 cases of thyroid malignancy. This report gives statistical data of this disease in a large southern city and discusses the criteria for clinical diagnosis as well as surgical treatment.

Material

This report is based on 124 cases of thyroid malignancy. One hundred and forty-seven cases were gathered from six hospitals in the greater Atlanta area, covering the years 1947-1956. Of the 147 cases obtained, we studied 117, eliminating 23 cases in which pathology reports were not available. Seven additional cases belong to one of us (D.H.P.) who operated and followed them for many years prior to 1946. The diagnosis of the several pathologists was accepted, and we did not include the questionable cases or the cases in which malignancy was reported for the slides were not available. Although our follow-up is almost complete, most of these cases

will have to be studied for many years before we can present findings which could be considered conclusive.

Incidence: A total of 3,653 thyroidectomies were performed during the last 10 years (Jan. 1, 1947-Dec. 31, 1956) in six hospitals of the greater Atlanta area. Among them, 147 cases or four per cent were reported as malignant (Table 1). Other authors

	Number	Percent
Thyroidectomies	3653	—
Malignant Lesions	147	4

Table 1: Incidence of malignancy in thyroid operations, 1947-1956.

report their incidence as 1.5 per cent (Richard⁹ and 2.3 per cent (Meissner & Lahey⁸).

Age and Sex: The age and sex distribution of the cases of thyroid malignancy is presented in Table 2.

Thirty-three or 26.6 per cent were male and 91

Age	Male	Female	Total	Percent
1-10	1	1	1	0.8
11-20	4	5	9	7.3
21-30	5	17	22	17.7
31-40	6	15	21	17.0
41-50	6	17	23	18.5
51-60	7	18	25	20.2
61-70	5	10	15	12.1
71-80	8	8	8	6.4
TOTAL	33	91	124	100.0%
Percent	26.6	73.4		
Average age	41.6	43.7	43.3	

Table 2: Age and sex distribution in 124 cases of thyroid malignancy.

TUMORS OF THE THYROID / Skandalakis

or 73.4 per cent were female. The youngest patient was a female, seven years old, and the oldest also a female 76 years old. The malignancy strikes most frequently during the third, fourth fifth and sixth decade. In this series, four males and six females were found to be under 20 years of age; a percentage of eight. Twenty-three patients were over 60, a percentage of 18.5.

Family History: Ten cases or 7.1 per cent were found with a family history of "Goiter." As to benignancy or malignancy no mention was made.

	Parents	Siblings	Both	Total	Percent
"Goiter" (Not known if benign or malignant)	5	4	1	10	7.1
Other Malignancy	4	1		5	3.6

Table 3: Family history in 124 cases of thyroid malignancy.

Other malignancy was found in five cases (Table 3).

Symptoms: In our series, the symptomatology of thyroid malignancy can be appreciated by Table 4.

In 39 cases, or 30.6 per cent, the mass was an incidental finding during physical examination.

	No. of Cases	Percent
I. Without any Symptom (Mass on incidental finding)	38	30.6
II. With Symptoms* such as:		
Swelling in the neck . . .	75	60.4
Dysphagia	17	13.7
Pain	16	12.9
Hoarseness	15	12.1
Weight loss	14	11.3
Difficulty in breathing . . .	12	9.7
Voice change	10	8.6
Any other discomfort (e.g. pressure, weakness)	7	5.6
Toxicity	6	4.8

* More than one occurred in some patients.

Table 4: Symptoms in 124 cases of thyroid malignancy.

Symptomatology in the rest of the cases varied from one to a combination of two or more. In 75 cases, swelling in the neck was found, etc., as in the table.

Signs: A firm or soft mass in the thyroid area occupying one or both lobes with or without local nodes and with or without remote metastasis is probably a sign of thyroid malignancy but not a criterion for accurate clinical diagnosis. We do not believe that there are criteria or pathological signs for a pre-operative diagnosis. In a few instances, when remote metastasis is present, when

	No. of Cases	Percent
Undiagnosed	109	87.8
Diagnosed	15	12.2
TOTAL	124	100.8%

Table 5: Diagnosis of thyroid malignancy prior to surgery.

paralysis of the larynx, or disphagia is associated with a hard mass, the diagnosis is obvious. In our series of 124 cases, in only 15 instances was pre-operative diagnosis made; a percentage of 12.2 per cent (Table 5, 6, 7). Some authors, and among them Crile, support the idea that clinical diagnosis can be made in almost 90 per cent of the cases. With all due respect to their opinion, we do not know how. In some of our cases, we think that pre-operative diagnosis should have been made because of evidence of local or remote metastases. If we add these cases, we still see that no more than 29.3 per cent would have had a clinical diagnosis.

What are the criteria for diagnosis of thyroid malignancy where the tumor is an incidental finding without any other signs or symptoms? Again, we respect Dr. Crile's opinion, but cannot agree with him.

SYMPTOMS*	
Swelling	4
Rapid Swelling	1
Pain	1
Dysphagia	3
Difficulty in Breathing	2
Hoarseness	1

* More than one occurred in some patients.

Table 6: Symptoms in 15 diagnosed cases of thyroid malignancy.

Pathology: Our pathological classification is modified from that of Frazell and Foote,⁶ and Meisner and Lahey.⁸

It is based on the clinical picture as well as the patient follow-up as seen from a surgical aspect. We make no attempt to "muddy up" water which is already confusingly unclear.

Firm Thyroid Mass	4
Extra-Thyroid Mass (Neck) Only	5
Combined Thyroid and Extra-Thyroid Mass	1
Thyroid Mass and Remote Metastasis	5

Table 7: Signs in 15 diagnosed cases of thyroid malignancy.

Table 8 shows that in 34 instances, the right lobe was involved and in 28 the left. The isthmus was found to be involved in six instances and both lobes involved in 28 instances.

In 68 cases or 63 per cent, the thyroid was found to be nodular and in eight cases or 7.4 per cent, diffuse enlargement was noted.

Local metastasis was found in 36 cases.

Table No. 9 shows the various types of thyroid malignancy in the series.

Invading Adenoma

Here we refer to tumors which show no cellular appearance of malignancy but show normal appearing thyroid tissue invading veins, lymphatics, and capsule. All four cases are living and well two, three, five and eight years after surgery. None of the surgery done in these cases was radical. Three out

Location	Nodule		Diffuse	No Record of Appearance	Extra Cases	Number of Cases	Total No. of Cases	Per Cent of Cases	Total Per Cent of Cases
	Single	Multi.							
Right Lobe	10	6		9		25	34	23.0	
Right Lobe and Extra-thyroid (Neck)	5	1	1	2		9		8.3	31.3
Left Lobe	10	4		6		20		18.5	
Left Lobe and Extra-thyroid (Neck)	3	3		1		7	28	6.5	25.9
Left Lobe and Isthmus		1				1		0.9	
Isthmus	4					4		3.7	
Isthmus and Extra-thyroid (Neck)	1			1		1	6	0.9	5.5
Both Lobes		16	4			21		20.4	
Both Lobes and Extra-thyroid (Neck)		3	3			6		5.5	26.8
Both Lobes and Met. to the Ribs		1				1	28	0.9	
Extra-thyroid Mass (Grossly Thyroid Gland) Normal					(13)→	13		11.9	
Total	33	35	8	19	13	% 108			
Percentage	30.6	32.4	7.4	17.6	12.0	=100.0			
	68	63%							

Table 8: Location and description of mass in 108 cases at the time of admission.*

of four were female. The youngest is 21 years old and the oldest 72.

Papillary Adenocarcinoma

Forty-nine of 124 cases of thyroid malignancy were reported as papillary carcinoma. This group is the largest in our series. The average age in these cases was 38.5 with extremes of 11 and 71 (Table 10). Thirteen were males and 36 females. Papillary adenocarcinoma in our series was most frequent during the second (28.6 per cent), third, (26.5 per cent) and fourth decade (18.4 per cent).

	No. of Cases	Percent
I. Invading Adenoma— 4 or (3.2%)		
II. Adenocarcinoma— 92 or (74.2%)		
1. Papillary	49	39.5
2. Follicular and alveolar	17	13.7
3. Mixed	12	9.7
4. Non Classified	14	11.3
III. Carcinoma Simplex— 14 or (11.2%)		
1. Small cell	3	2.4
2. Giant cell	4	3.2
3. Non Classified	70	5.6
IV. Rare Tumors—9 or (3%)		
1. Hurthle cell	2	1.6
2. Lymphosarcoma	3	2.4
3. Spindle cell sarcoma	1	0.8
4. Epidermoid carcinoma	2	1.6
5. Malignant paraganglioma	1	0.8
V. Non Classified—5 or (4.1%)		
TOTAL	124	

Table 9: Pathologic classification of 124 cases of thyroid malignancy.

Three of these patients were under 20 years of age and five were more than 60 years of age.

* In 16 cases the Thyroid Gland was not described concerning location and nodules.

Pre-operatively, diagnosis was made in five cases, a percentage of 10 per cent in the 49 cases. The average onset prior to operation was approximately three years with extremes of two days and 32 years.

Fifteen of 49 cases had a palpable thyroid and cervical nodes at the time of admission. Under the microscope, 10 of them showed metastases and five only inflammatory reaction.

Five cases (10.2 per cent) without cervical nodes clinically proved to have L. N. metastasis. In MacDonald's7 cases approximately 25 per cent showed unsuspected lymphnode metastases.

Nine cases were found with non-palpable thyroid (normal grossly) but with a unilateral, extra-thyroid mass. In all cases, the extra-thyroid mass was found to be metastatic thyroid carcinoma and after thyroidectomy the primary malignancy was found in the thyroid gland. The right lobe was involved 15 times, the left lobe nine, both six times and on one occa-

Age	Male	Female	Total	Percent
11-20	22	1	3	6.1
21-30	2	12	14	28.6
31-40	4	9	13	26.5
41-50	1	8	9	18.4
51-60	2	3	5	10.2
61-70	2	1	3	6.1
71-80		2	2	4.1
TOTAL	13	36	49	100.0%
Percent	26.6	73.4	100%	
Average age	39	38	38.5	

Table 10: Papillary adenocarcinoma of the thyroid gland, age and sex distribution in 49 cases.

sion involvement of the left lobe and isthmus was noted.

In nine cases location was not noted. Four cases were presented with remote metastasis at the time

TUMORS OF THE THYROID / Skandalakis

of admission (two to the lungs, one in the mediastinum and one cerebral). There is no follow-up of the cases with lung and mediastinal metastasis. We presume that these three cases are dead. The case with cerebral metastases is most instructive and interesting: This 1 year old white female presented with a movable, hard mass of four months duration and with neurological findings resembling cerebral metastases. With the diagnosis of "thyroid carcinoma and cerebral metastases," treatment with radioactive iodine was started immediately, and the patient recovered slowly but completely enough to tolerate right total and left subtotal thyroidectomy seven months after the onset. Of course, there was no positive proof of the cerebral metastases, but we believe that the remote metastases cleared miraculously in this particular case with the help of I-131.

We found seven recurrences in our series with papillary carcinoma. These happened as follows: Two the first year, two the second year, two the sixth year, and one the twelfth year after surgery. Local metastasis (neck) after the operation was found in two instances: three months after surgery and two years after surgery. Three recurrent local metastases were found four, five, and 11 years after the operation.

Eight cases were lost to follow-up. (Two of them five years and two of them seven years after surgery) All of the remaining 41 patients are alive and well as follows:

- 10 one year after surgery
- 7 two years after surgery
- 8 three years after surgery
- 5 five years after surgery
- 8 ten years after surgery
- 1 fifteen years after surgery
- 2 twenty years after surgery

This is in contrast to the papillary carcinoma in Frazell & Foote's⁶ series in which 21 per cent were dead after five years.

The treatments in these cases were total, subtotal, partial unilateral or bilateral thyroidectomy, with and without radical neck dissection.

From our figures we can say that papillary carcinoma is "a benign malignancy" if this term is permissible. The evidence of rare, remote metastasis; regional spread only to the cervical lymph nodes; and generally, the low growth potential plus the rarity of recurrence even after inadequate and certainly no radical surgery, is characteristic of this type of malignancy. However, we must never forget that papillary carcinoma can kill the patient even if this action starts years after onset or after surgery. Our

opinion as to treatment will be discussed later in this paper.

Follicular Adenocarcinoma

Seventeen cases of this type of malignancy were reported. The average age was 41. There were four males and 13 females. The youngest patient was 18 years and the oldest 62 years of age.

Three local metastases and two remote (one, lungs* and one, ribs) presented at the time of admission. Frazell & Foote reported 45.4 per cent had metastasized to bones on admission. In our series we found only one case. In one case recurrence occurred two years after thyroidectomy. Two cases lost to follow-up shortly after surgery. Two deaths in this series were reported, both due to causes not related to thyroid carcinoma.

All the rest, 13 cases, are living and well. Our follow-up is not long enough for final results but in this series there were patients with five, 15, and 16 years survival. In only four cases was total thyroidectomy done.

Mixed (Follicular and Papillary) Adenocarcinoma

In our series, 12 cases of mixed, papillary and follicular type were found. Four were males and eight females. The average age was 43 with extremes of 21 and 63.

Five of these cases presented with local metastasis at the time of admission. Two cases had a local metastasis 12 and 16 years after surgery. No remote metastases were found in these cases.

One case was lost to follow-up. All the others are living and well one, two, seven, eight, 13 and 16 years after surgery.

Non-Classified Adenocarcinoma

This is a report of 14 cases. The average age was 48 with seven and 75 years at the extremes. Twelve were female and two male. Five cases showed local metastasis at the time of operation. One case showed metastasis to the cervical and dorsal vertebrae two years after thyroidectomy. Cervico-dorsal decompression laminectomy was performed plus I-131 therapy and the patient is living and well two years after surgery. Two cases showed lung metastases nine months after surgery. One of them died. On autopsy metastases to the hips and bladder were found also. This patient had originally undergone a total right and subtotal left thyroidectomy with a right neck dissection. Three cases are lost to follow-up, among them the other case with pulmonary metastases. The remaining cases are living and well two, three, and five years after surgery.

Carcinoma Simplex

Fourteen cases were reported as carcinoma sim-

* The case with lung metastases is living and well one and a half years after thyroidectomy.

plex. Three were small cell, four giant cell, and seven not classified. The average age in these cases was 52 with extremes of 12 and 76 years. There were four males and 10 females. This is a highly fatal form of thyroid cancer, death being usually due to tracheal obstruction. There were 12 recorded deaths; nine within the first three months after surgery and the remaining three within one year. One is living and well four years after surgery. This is a 12 year old boy who had an isthmectomy followed only by x-ray therapy. Three years later he developed recurrence with a local metastasis and underwent a total thyroidectomy. One case was lost to follow-up two months after surgery and presumably is dead. Recently, Ross reported a five year survival in one patient with a large anaplastic type of tumor.

Usually these lesions had a similar appearance, grossly. Most involved both lobes, were firm, and bound to surrounding tissues. Five cases showed local metastases at the time of admission and four had remote lesions (three to the lungs and one to the vertebrae and spinal cord with paraplegia).

cases. A 64 year old female is living and well four years after surgery without evidence of recurrence. The second case, a 17 year old male, was alive and well two years after the operation.

(2) *Lymphosarcoma*: Many authors, and among them Ackerman,¹ do not believe that there are true lymphosarcomata in the thyroid.

In our series there were three cases of primary lymphosarcoma of the thyroid. Two underwent surgery (thyroidectomy) and the third only biopsy of lymph node.

The longest follow-up of three years was in a 39 year old female who is alive and well without metastasis. One is alive and well after one year (52 year old female). The third patient died after two years with remote metastases (69 year old female). All three received post-operative x-ray treatment. All the eight cases of Dinsmore et al⁵ died within seven months despite surgical and x-ray therapy. Ackerman reported a seven year survival in a lymphosarcoma of the thyroid.

(3) *Spindle Cell sarcoma*: The spindle cell sar-

Type of Malignancy	No. of Cases	Survival				Deaths	Deaths
		Under 5 Yrs.	Over 5 Yrs.	Over 10 Yrs.	Over 15 Yrs.		
I. Invading Adenoma	4	4					None
II. Adenocarcinoma							
Papillary	49	34	7	4	4		None
Follicular	17	10	3		2	2	Not related to thyroid CA
Mixed	12	8	2		1	1	13 yrs. after surgery due to local infiltration
Non-classified	14	10	3			1	1½ yrs. after surgery due to extensive remote metastases
III. CA Simplex	14	1	0	0	0	13	All within the 1st year. (9 of them within 3 months)
IV. Rare Tumors	9	7	0	0	0	2	1 lymphosarcoma—died 2 yrs. after surgery with remote metastases. 1 spindle cell sarcoma 2 yrs. after surgery with local infiltration
V. Non-Classified	5	3				2	1 month post-op—local spread 3 yrs. post-op—lung metastases
TOTAL	124	77	15	4	7	21	
		62.2	12.1	3.2	5.6	16.9	

Table 11: Post-operative survival in 124 cases of thyroid malignancy.

Total, sub-total, or partial thyroidectomy was the usual type of operation. X-ray treatment post-operatively was given in seven cases. I-131 was given therapeutically in one case with no effect.

Rare Tumors

Our experience with these so-called "rare tumors" is limited. We found only nine cases in our series:

- 2 Hurthle cell carcinoma
- 3 Lymphosarcoma
- 1 Spindle cell sarcoma
- 2 Epidermoid carcinoma
- 1 Malignant paraganglioma

(1) *Hurthle cell carcinoma*: There were two

coma was a 66 year old female who died two years after surgery due to local infiltration of the disease.

(4) *Epidermoid carcinoma*: There were two cases of epidermoid carcinoma. One case is a 30 year old male who was terminal when last seen seven months post-operation; and a 72 year old female who was lost to follow-up after operation. No radical surgery was performed in any of these so-called "rare tumors."

(5) *Malignant paraganglioma*: (See Fig. 1*) We believe this is the first reported case. The patient is a 57 year old male who had a goiter for many years

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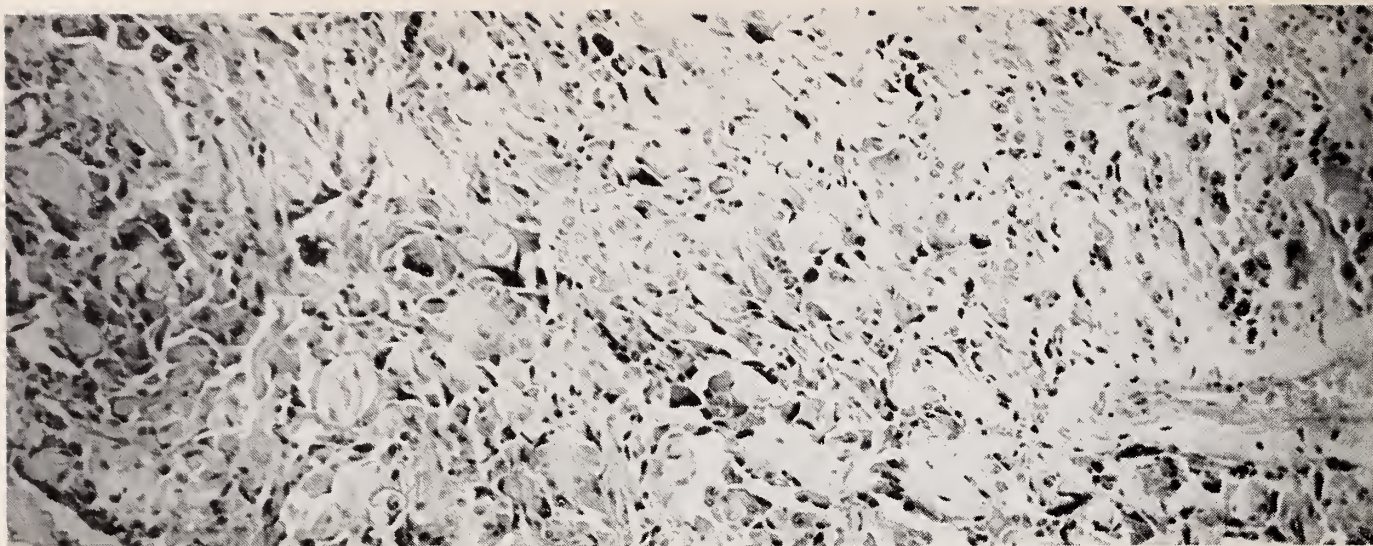


Figure 1: Malignant paraganglioma of the thyroid gland.

prior to admission. He had at operation a 3.5 cm. nodular mass involving the entire right lobe. A right lobectomy was done and the patient was living and well five years after the operation. There was no evidence of adrenalin-like function in this tumor.

Non-Classified Thyroid Malignancy

Five cases with two deaths. Two of the cases were lost to follow-up. Therefore, only one case is known to be living and well today.

Deaths

This table shows that of 124 cases 19 died due to thyroid carcinoma. Thirteen had highly malignant tumors and all died within the first year. It is characteristic of the four sarcomas that two died two years after surgery.

Treatment

Starting from the theory that all the nodules in the thyroid gland are potentially malignant, exploration is mandatory in all the cases of thyroid tumor.

There is confusion in the literature with reference to nomenclature of the operative procedures of the thyroid gland. We believe that the terms total, sub-total (for more than 50 per cent) and partial (for less than 50 per cent) lobectomy of the thyroid gland (unilateral or bilateral) should be used. In a few charts, the location of the malignant lesion in the gland was not reported. The primary responsibility of recording location belongs to the surgeon, but the pathologist should also record this important information.

The cooperation of surgeon and pathologist is the primary factor toward better scientific judgment. We believe that the pathologist should always be present in the operating room and a frozen section should be made. With the diagnosis "malignancy" and "type of malignancy" a scientific discussion

should ensue between the surgeon and pathologist. Thyroid cancer behaves so curiously and so capriciously that more than one brain is needed for the "Taming of this Shrew."

We want to emphasize that adequate surgery will give better results. With thyroid carcinoma we cannot make rules. Each case requires individual treatment. At the time of surgery the clinical picture as a whole, the operative findings, and the pathological report should all play a great role in the decision as to treatment. However, we believe that "total extra-capsular thyroidectomy," if possible, for any thyroid malignancy, not including the anaplastic type, is the treatment of choice. If lymph nodes are present total extra-capsular thyroidectomy plus neck excision of nodes or en bloc dissection if an infiltrative process is present should be performed.

We also wish to emphasize that total thyroidectomy today is not a big procedure. The risk of injury to the recurrent laryngeal nerve is almost nil in skilled hands. Today, metabolic problems resulting after total thyroidectomy such as myxedema and tetany can be handled very well with the help of the endocrinologist. In our series we found three cases (two per cent) in which the involved nodes were contralateral and four (15 per cent in MacDonald's cases⁷) in which the grossly benign lobe was found to be malignant under the microscope. Even though this percentage is very small the need for a total thyroidectomy is obvious.

In a recent article Crile⁴ states that radical neck dissection is inadequate and mutilating treatment for locally metastatic papillary carcinoma of the thyroid because of the anatomical lymphatic spread which he states includes nodes which are not removed by an en bloc dissection. In our 49 cases of papillary carcinoma 24 showed local cervical metastases (Table 12). Fifteen of these cases underwent radical neck dissection, and nine had excision of nodes only.

Twelve of the 15 radical neck dissections are living and well six months to 19 years after surgery. The other three were lost to follow-up.

Five node excision cases are living and well one, three, six, and 17 years after surgery. Four were lost to follow-up (one, one month; two, five years; and one, seven years after surgery).

Our series of papillary carcinoma, although small and inadequate as to follow-up tends to show that there is no difference with reference to survival among cases with cervical metastases in which radical neck dissection was done, and cases in which no radical dissection was done. We are only pointing this out and not necessarily supporting Dr. Crile's views.

Post-operative survival in our whole series is shown in Table 11. We do not want to follow the extreme optimism of Crile^{2,3,4} or the conservative pessimism of the Memorial Group.⁶ We believe that we have to treat the patient as well as the cancer.

Again we emphasize that the discussion of a case with the pathologist should not be considered a mark of inferior surgical skill but rather a sign of mature surgical judgement.

Summary

- 1. 124 cases of thyroid malignancy occurring in a large southern city have been reviewed.
- 2. Statistical data is given for the whole series including incidence, age, and sex distribution, family history, symptoms and signs, and survival.
- 3. A classification of the thyroid malignancies is presented and each of the categories is discussed individually.
- 4. Papillary carcinoma is the largest group in our series accounting for 39.5 per cent. There were no recorded deaths. This type of tumor is felt to be the least malignant.

	Radical Neck Dissection	Excision of Nodes
Total No.	15	9
Alive and well	12 (6 months to 19 years after surgery)	5 (1 year to 17 years after surgery)
Lost follow up	3 (1 year to 3 years after surgery)	4 (1 month to 7 years after surgery)

Table 12: 24 cases of papillary adenocarcinoma with cervical metastasis.

5. Carcinoma simplex is the most devastating type of thyroid malignancy. Twelve out of 14 known dead within one year after diagnosis.

6. Nine cases of rare tumors are presented and among them the first reported case of a malignant paraganglioma primary in the thyroid.

7. Treatment is discussed with emphasis on close cooperation between surgeon and pathologist.

Piedmont Hospital

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PRESENT STATUS OF CHEMOTHERAPY IN TUBERCULOSIS

A progress report on currently accepted principles and practice to serve as a guide to the physician treating tuberculosis.

A. FREDERICK BLOODWORTH, M.D., Gainesville, Ga.

AT THIS WRITING there is no generally accepted optimum regimen in the chemotherapy of pulmonary tuberculosis. Streptomycin (SM), aminosalicylic (PAS) formerly para-aminosalicylic acid, USP XIV, and isoniazid (INH) are the three most commonly used drugs, but there is no unanimity of opinion as to which combination of these is most effective. However, it is emphasized that the best results are obtained when two or more drugs are combined and given continuously for a prolonged period of time. In general, it is probably unwise ever to treat a case of clinically active tuberculosis with one drug alone unless other drugs are contraindicated. Chemotherapy should be given for at least a year, even in minimal cases, and in advanced cases for a total of 18 to 24 months or at least until the stage of inactive disease is reached.

In all cases of tuberculosis, efforts should be made to culture the tubercle bacilli initially and to determine drug susceptibilities. This is essential in re-treatment cases. Susceptibility studies are especially important if cultures remain positive for changes in drug therapy may be based on changes in susceptibility.

Specific Drugs

The following drugs are useful in treating tuberculosis:

Isoniazid is a potent drug. It is effective at low concentrations, is readily absorbed, and penetrates all tissues of the body. It is easily administered and is relatively nontoxic with good patient acceptance. The most commonly accepted dosage of INH at the present time is four to five mg. per kg. of body weight daily, in two or three divided doses. It is estimated that some individuals will have inadequate serum levels of INH as measured by bio-assay on this dosage level. Evidence is at hand that about 8 per cent of patients with new tuberculosis will do well on standard doses of INH (300 mg. per day) in combination with other effective drugs. In the 15 per cent, particularly in patients with more advanced disease with large or multiple cavities, it

is probably advisable to individualize the dosage of the drug with consideration given to higher dosage. Toxic effects of this drug, particularly peripheral neuritis, are commoner at the higher levels and pyridoxine (100 mg. per day) must be administered concurrently whenever the higher dosages are to be used. Hypersensitivity reactions may occur in the use of this drug as with streptomycin or PAS.

There are two major facts to be kept in mind in the use of INH: (1) As with most of the other effective drugs the tubercle bacilli readily becomes resistant to this drug when it is administered alone; (2) Isoniazid is degraded in human subjects into several derivatives such as acetylisoniazid which are biologically inactive; such inactivation varies significantly from individual to individual. Serum levels of this drug determined by the standard chemical methods will not reveal the inactivation, but it will be evident if bio-assay methods are used.

Streptomycin and dihydrostreptomycin continue to be among the most effective antituberculosis agents at our disposal. Each has the same therapeutic value and the dosage is the same for both. They are generally administered in a dosage of at least one gm. twice weekly by intramuscular injection. In this dosage streptomycin rarely causes vestibular damage and dihydrostreptomycin rarely results in deafness. In an effort to avoid these rather remote possibilities some physicians prefer a combination of streptomycin 0.5 gm. and dihydrostreptomycin 0.5 gm. In studies reported by the British Medical Research Council it was evident that, when administered in combination with daily INH, streptomycin was more effective in preventing the emergence of INH resistant organisms when given in daily dose of one gm. as compared with dose of one gm. twice weekly. Preliminary reports are appearing indicating that in some patients, particularly those with advanced disease, intermittent streptomycin may be less effective than daily administration of one gm. of this drug. It may be advisable to give streptomycin in doses of one gm. daily for at least

30 days to a patient severely ill on admission before reverting to intermittent therapy. Hypersensitivity to streptomycin occurs occasionally and is manifested by fever, rash, and sometimes exfoliative dermatitis. In patients with less severe reactions, desensitization may be accomplished by starting with a very small dose and gradually increasing; with more severe reactions desensitization may be hazardous and probably should not be attempted. Occasionally, a patient hypersensitive to streptomycin may be able to tolerate dihydrostreptomycin and vice versa.

Aminosalicylic acid remains an important agent in the antimicrobial therapy of tuberculosis due to its ability to prevent or postpone resistance to streptomycin and INH; and to its ability to enhance the serum levels of active INH. Many forms of this drug are on the market from the acid product to sodium, potassium and calcium salts of the acid, a buffered product, and other forms. The dosage for all of these must be adjusted to the dose of the acid. In other words, 15 gm. of sodium PAS is the equivalent to 12 gm. of acid PAS. Many patients will have less gastro-intestinal intolerance on some one of these products than on others. There is some difference in blood levels produced with these drugs. Sodium and potassium PAS being rapidly absorbed have rapid peaking and falling off of blood levels, while with other forms a more prolonged peak may be attained. The clinical significance of this is undetermined at the present time.

PAS preparations of all types if stored too long or exposed to undue heat, light, or moisture, deteriorate and discolor, resulting in increased intolerance or actual toxicity. PAS should be prepared fresh if given in solution. Under best conditions, side reactions of anorexia, nausea, and diarrhea are not uncommon with all forms of PAS, but are not necessarily indications for discontinuing the drug. Occasionally patients develop more severe reactions with fever, rash, and rarely with severe systemic reactions stimulating infectious mononucleosis.

PAS alone is relatively not very effective as a treatment for tuberculosis and should always be used in combined therapy. It has been shown recently that PAS, when administered concurrently with INH, will enhance the level of free INH in the serum of patients who rapidly inactivate INH. In Europe intravenous PAS is being used extensively and claims have been made for its value by this route.

The standard dose of PAS in this country is 12 gm. daily in three divided doses, although some studies have indicated that smaller doses of the active substance may well be useful, particularly if full dosage is not tolerated.

Viomycin has a useful though rather limited place in the treatment of the patient whose organisms are resistant to isoniazid and streptomycin and for whom an umbrella is desirable for resectional surgery. The usual dosage is two gm. (IM) twice weekly for two or three weeks before surgery and eight to ten weeks or more postoperatively. When feasible it should be combined with another drug to which the organisms are sensitive. Renal toxicity precludes the daily use of this drug, but is less evident when used twice weekly.

Pyrazinamide (PZA) is now undergoing clinical investigation by the Veterans Administration—Armed Forces group, the USPHS group, and others, particularly in combinations with isoniazid. It has been found to be effective in combination with INH when administered to patients who have never received either drug before. There is some evidence that this drug may be effective for short periods of 30 to 60 days when used alone, particularly to cover resectional surgery in patients resistant to the other major drugs. In most studies reported, there has been a significant factor of toxic effect on the liver; approximately 10 per cent of the patients receiving pyrazinamide have shown abnormal results in liver function studies and about three per cent have shown frank jaundice. When this drug is administered liver function studies should be done periodically to estimate any liver toxicity. Most of the toxic conditions resulting from the use of this drug, however, revert to normal when the drug is withdrawn. PZA should be discontinued promptly if significant disturbance in liver function is noted and invariably if jaundice appears. At the present time, due to severe toxicity of the drug, it should be administered only to patients in the hospital. This drug is ordinarily administered in dosage of from 30 to 40 mg. per kg., orally administering no more than three gm. daily. Hyperuricemia has been reported in conjunction with the use of PZA.

Cycloserine is a relatively new antibiotic under investigation for use in the treatment of tuberculosis. Preliminary studies have shown that this drug used alone is not as effective in the treatment of tuberculosis as are the various combined drug regimens now in use. At present, studies are in progress to determine the effectiveness of this drug when used in combinations with INH. Reports of toxicity, particularly to the nervous system, have continued such as tremors, drowsiness, convulsions and psychoses. Most investigators originally used this drug in dosage of one gm. daily, orally, in divided doses. Newer studies indicate a maintenance of therapeutic effectiveness and nearly complete absence of toxicity when administered in doses of 0.25 gm. twice daily in combination with isoniazid.

CHEMOTHERAPY IN TB / Bloodworth

Recommended Regimens: Though there is no generally accepted optimum chemotherapy regimen for pulmonary tuberculosis at the present time recent reports of the Veterans Administration—Armed Forces Group and of U. S. Public Health Service sponsored studies indicate that the following regimens give approximately the same clinical results in most cases of tuberculosis: (1) Isoniazid, 300 mg. daily plus PAS 12 gm. daily; (2) Isoniazid 300 mg. daily plus SM one gm. twice weekly, and (3) Isoniazid 300 mg. daily plus SM one gm. twice weekly plus PAS 12 gm. daily. The Veterans Administration and U. S. Public Health Service studies indicate that the regimen of streptomycin one gm. twice weekly and PAS 12 gm. daily is not quite the equal of the other three regimens, and that in far advanced disease with large cavities INH-PAS is superior to intermittent SM-INH.

As has been pointed out above, there is increasing evidence that the drug regimens must be individualized in certain patients, particularly in those with more advanced disease, with larger doses of INH and daily SM being administered as indicated.

Acute Military Tuberculosis

Isoniazid has proved to be very effective in the treatment of miliary tuberculosis with survival rates of 90 per cent and higher being reported. Any standard INH containing combined regimen should be adequate in treating this condition, but due to the serious nature of miliary tuberculosis many still advocate the use of triple drug therapy with higher dosages of isoniazid such as 10 mg. per day being used. The drug therapy should be continued for at least 18 months.

Tuberculosis Meningitis

Reports during the past several years indicate that survival rates of 80 per cent to 90 per cent or higher are possible in tuberculous meningitis when INH, SM, and PAS are administered for a minimum of 24 months. The Committee suggests a dosage schedule similar to that for miliary tuberculosis. Intrathecal medication is not recommended. It is of the utmost importance to start the treatment immediately if the history, physical examination, or spinal fluid findings strongly suggest a diagnosis of tuberculous meningitis. If the patient's condition does not permit oral medication, the INH and PAS may be given parenterally, initially.

Genitourinary Tuberculosis

Genitourinary tuberculosis responds very well to combined drug therapy including INH, SM and PAS in dosage as recommended for pulmonary tuberculosis. The drug should be administered for

18 to 24 months. Recent reports from the Veterans Administration—Armed Forces study indicate that long term therapy with INH, SM and PAS is very often definitive in such cases and the need for surgical intervention is becoming surprisingly less frequent.

Tuberculosis in Childhood

The Committee recommends that all children with active primary tuberculosis should receive antimicrobial therapy. The complications such as miliary and meningeal tuberculosis which sometimes occur in primary disease have sharply declined since the advent and use of INH.

Consideration should be given to the treatment of recent tuberculous converters, particularly in children under four years of age. In children with active tuberculosis, the physician should always be on the alert for the development of miliary or meningeal tuberculosis. The approximate dosages of the antituberculous drugs for children are as follows: SM 30 to 40 mg./kg. twice weekly, INH 10 to 16 mg./kg day and PAS 200 mg./kg./day. Children tolerate higher dosages of INH well and administration of pyridoxin is usually not needed to prevent toxicity.

Other Forms of Tuberculosis

When the disease involves such organs and tissues as the larynx, mouth, lymph nodes, trachea, bronchi, GI tract, and bone it is best treated by long term combined chemotherapy using one of the regimens recommended for pulmonary tuberculosis.

Tuberculous Pleurisy with Effusion

This condition should be treated as a case of active pulmonary tuberculosis with long term continuous combined chemotherapy for a year or more. This recommendation also applies to the so-called idiopathic pleurisy with effusion patients with a positive Mantoux even though careful studies fail to reveal presence of tubercle bacilli in the pleural fluid. Experience has shown that in such cases the etiology is usually tuberculous and should be treated as such in order to avoid reactivation later.

Steroid Therapy in Tuberculosis

The exact role of cortisone and related compounds in the management of infectious diseases is undefined. However, the greatest difference of opinion regarding the place of steroids exists in the field of tuberculosis. Some have felt that this form of therapy is always contraindicated while others have recommended its use under certain specific circumstances. Some of the tissue damage and clinical manifestations in tuberculosis are due to an exaggerated interaction between sensitized tissue and tuberculo-protein.

Corticosteroids may suppress this overactive de-

fense mechanism with a resulting decrease in the manifestations of illness. In patients seriously ill with tuberculosis of long duration there is evidence of adrenocortical hypofunction. Steroid therapy used with concomitant antituberculosis chemotherapy often effects striking symptomatic improvement. Thus, without anticipating any change in the ultimate outcome, the use of steroids would appear to be justi-

fied, if only for its symptomatic effect, in patients hopelessly ill with advanced tuberculosis. In acute forms of tuberculosis associated with severe clinical illness, steroids may be helpful. This is especially true of miliary and meningeal tuberculosis. In the latter condition, prevention and relief of cerebrospinal fluid block has been attributed to steroids.

401 E. Broad Street

THE MONTH IN WASHINGTON

AT LEAST FOR this year, it appears that Congress will keep its hands off tranquilizer drug regulation. The issue was studied by a House Government Operations Subcommittee in three days of hearings, where experts on tranquilizers testified. With few exceptions, they told the subcommittee they thought the situation was well in hand now and that no new legislation was needed.

The investigation grew out of reports that (a) some tranquilizer manufacturers are misleading doctors in literature describing the drugs and its advertisements in medical journals, and (b) somehow the general public is reading these claims and prevailing on doctors to prescribe the drugs when they aren't indicated medically.

A report, when issued by the full committee later in the year, is expected to point out some of the danger areas explored at the hearings, but not to make a strong demand for further federal regulation in this area.

Dr. Leo Bartemeier, chairman of the American Medical Association's Council on Mental Health, told the subcommittee under Rep. John Blatnik (D., Minn.) that he knows of no "gross misrepresentation" of the drugs, and that it is his understanding that the producers subject the drugs to careful tests before releasing them to the medical profession. Dr. Bartemeier explained that the drugs are helpful in bringing mental patients in contact with reality, thus preparing them for treatment.

Dr. Robert H. Felix, head of the National Institute of Mental Health, agreed that the tranquilizers are "a new source of hope" for patients and psychiatrists alike, but he pointed out that their success actually highlighted the acute shortage of trained psychiatric personnel in public mental hospitals. He said that too many patients, after being made ready for treatment through use of the drugs, have to wait for long periods until overworked psychiatrists can start their treatments.

Two other government witnesses also said no new legislation is needed. They were Dr. Albert H. Holland, Jr., medical director of Food and Drug Administration, and Commissioner Sigurd Anderson of the Federal Trade Commission. They argued that even the most questionable wording does not mislead the wary physician, and that there is no record in 20 years of any drug advertisements sent exclusively to the profession that carried false or misleading claims.

Dr. Nathan Kline, research director for the New York State Department of Mental Hygiene, said there may be occasional abuses or "honest mistakes," but that they are not frequent enough to justify new legislation.

Dr. Kline did suggest that it might be wise to give Food and Drug Administration full authority over

policing of advertising. At present FDA is responsible for checking on claims on labels or inclosed literature, and Federal Trade Commission for checking advertisements. The advantage would lie in FDA's authority to move faster against producers in case of abuse.

Among the few who called for new control legislation was Dr. J. Murray Steele, who headed a New York Academy of Medicine study of tranquilizer advertising.

In contrast to evidence from witnesses before the Blatnik subcommittee, Dr. Steele said a number of psychiatrists had told his panel that the ads often serve more to mislead than to guide physicians.

Notes

A four-day Washington conference of representatives of organizations concerned with nursing homes and homes for the aged agreed on the need for federal legislation to help renovate and build facilities. Left open was the question of whether aid should be through grants or mortgage guarantees. Surgeon General Burney told the group that lack of good nursing homes was keeping "tens of thousands of older patients in general hospitals for prolonged periods beyond the time when they need or even can benefit from 'full-dress' hospital services."

* * *

Dr. David B. Allman, AMA president, has warned the country of food faddists and diet quacks. Speaking at the National Food Conference, he said too many people put off seeing a physician while accepting certain health foods, herb mixtures or "some other phony remedy." AMA and Food and Drug Administration are working on a program on the dangers of food quackery. This includes a television film.

* * *

Senator Lister Hill (D., Ala.), chairman of the Senate Appropriations sub-committee that handles the HEW budget, is convinced work should be pushed on the new National Library of Medicine building. Only planning funds have been voted to date. Hill wants the administration to endorse \$7 million for the library in the face of deterioration of the present structure. He cites an editorial in the Journal of the AMA on the need for action.

* * *

The House Government Operations Committee also has been busy in another field. Reporting on its long hearings of last year on advertising of filter tip cigarettes, the group declared: "The cigarette industry has done a grave disservice to the smoking public initially, blatantly and, more recently, very subtly publicizing the filter tip smoke as a health protection."

SOME EXPERIENCES WITH FLUOTHANE-A NEW NON-FLAMMABLE ANESTHETIC AGENT

Methods of evaluating a new anesthetic are outlined.

DAVID A. DAVIS, M.D.; KENNETH SUGIOKA, M.D.; and
CLAUDE A. TAIT, M.D., Chapel Hill, N. C.

FOR MANY YEARS there has been an intensive search for a good volatile anesthetic agent which would not explode. By and large, attempts to find such a drug have failed. Within recent years, this search has become more intense due to the increase in the use of electrical equipment in surgery. This report deals with some impressions gained in the clinical and experimental trial of the most recent compound advanced to fulfill the requirements of a non-flammable anesthetic agent—a drug known as “Fluothane” (trifluor chlorbrom ethane).

Compounds containing fluorine are relatively untried as anesthetic agents. In 1946 Robbins¹ reported on the anesthetic activity of some 46 compounds containing fluorine. Only four of these compounds seemed to possess any promise. Many of these drugs produced severe cardiac arrhythmias or marked central nervous system disturbances. In 1953 Lu, Ling, and Krantz² reported their experiences with fluorinated hydrocarbons and ethers. Of the several drugs which they studied, only trifluor ethyl ether seemed to show any promise. This drug has been subjected to clinical and experimental trial within the past few years. In 1956 Raventos³ of Imperial Chemicals (Pharmaceuticals) Ltd. of England published his observations on the effects observed in experimental animals by fluothane. Subsequently Johnstone⁴ and Bryce-Smith and O'Brien⁵ reported on results they had observed in humans anesthetized with fluothane.

From the standpoint of its physical characteristics, fluothane seems to be rather attractive. It is a heavy liquid (specific gravity 1.86 at 20° Centigrade) which will not burn. It has an odor which is rather pleasant. Its anesthetic potency is very high, requiring concentrations of 0.5 per cent to three per cent for surgical anesthesia. Its oil-water solubility is 330. It is quite stable although thymol 0.01 per cent is added to fluothane to stabilize the compound and prevent its degradation to volatile acids (dichloroacetic acid) in the presence of light. It seems to be stable in the presence of carbon dioxide and soda

lime. The ratio of the LC50 to AC50 is 3.3³ or about twice that of ether and chloroform.

Induction of Anesthesia

One of the most impressive characteristics of fluothane is the speed with which this drug acts. Induction by the open drop method or in combination with nitrous oxide is extremely rapid, comparing quite closely with chloroform. Just as impressive as the speed of induction is the speed with which the plane of anesthesia can be deepened by slight increases in the concentration of fluothane. Used in a Heidbrink vaporizer with nitrous oxide by the semi-closed technique, one is impressed by the rapidity with which anesthesia deepens after opening the vaporizer only one or two “clicks.” Patients may be taken to respiratory arrest quite rapidly.

Effects on Salivary Secretion

As a rule, patients anesthetized with fluothane seem to be unusually free of mucus and saliva, even when anesthetized by the open drop method.

Effects on Respiration

As might be expected, fluothane seems to be a potent respiratory depressant. The production of apnea is quite easy, and even in light planes of anesthesia the breathing of the patient seems to be depressed when compared with light ether anesthesia. During intense surgical stimulation, an increase in respiratory rate may be noted commonly, but there seems to be little increase in the depth of breathing. Because of these factors, assisted respiration is often indicated although this may add considerably to the hazard of fluothane anesthesia because of the ease with which respiratory arrest may follow.

One of the more striking findings in fluothane anesthesia is the ease with which controlled respiration may be secured by hyperventilation. Again this may seem highly desirable, but may be a considerable hazard particularly when gas machines are used in which the rate of vaporization depends upon the tidal or minute volume.

The tendency to bronchial spasm is conspicuous by its absence.

Effects of Fluothane on Circulation

It is within this area that the effects of fluothane anesthesia are most conspicuous and most disturbing. In most patients under light fluothane anesthesia, there will be noted a lowering of blood pressure and slowing of the pulse rate. Cardiac arrhythmias are not prominent although it is probable that more arrhythmias would be noted by more careful electrocardiographic monitoring. During deeper planes of fluothane anesthesia, hypotension and bradycardia are pronounced much more and cardiac arrhythmias of various types are frequent. These circulatory disturbances rapidly revert toward normal when the plane of anesthesia is lightened. According to Johnstone⁴ the hypotension and bradycardia are rapidly corrected by the administration of atropine, and the use of large doses of atropine in premedication is recommended by him. The peripheral vessels appear to be dilated, although there seems to be no tendency toward increased oozing in surgical wounds. Johnstone⁴ has described profound hypotension and bradycardia following the use of d-tubocurarine and controlled respiration which did not occur when succinylcholine and controlled respiration were combined. Because of the association of the cardio-vascular effects with depths of anesthesia, the ease with which anesthesia can be deepened, and the variability of vaporizing devices in American gas machines, it must be emphasized that extreme care be used in the administration of fluothane. At the present time, vaporizers are being developed which will limit the amount of fluothane which can be delivered, thus increasing the safety factor which is very narrow at the present time with present equipment. Johnstone⁴ suggests that the

circulatory changes accompanying fluothane anesthesia are due to a depression of sympathetic activity and peripheral vasodilation. Work done by us (Figure 1) indicates that fluothane is a very potent myocardial depressant, and it is our feeling that this mechanism of myocardial depression may account for much of the circulatory depression seen with fluothane. Although deaths due to circulatory failure have not been reported, it must be remembered that fluothane is a very potent circulatory depressant in that its effects may be manifested very rapidly, usually accompanying a change in the level of anesthesia which may not be appreciated by the usual clinical signs.

Effects on Hepatic and Renal Function

Although at first glance fluothane seems quite close to chloroform in its chemical configuration, the hepatic damage attributed to chloroform has been conspicuous by its absence in the cases reported by Johnstone and in the work done in experimental animals by Raventos.³ Likewise no renal damage attributable to fluothane has been observed. At the present time, several investigators are evaluating the effects of fluothane on hepatic and renal function, and their results should be available within a short period of time. Thus far they are encouraging.

Recovery From Anesthesia

Patients anesthetized lightly with mixtures of nitrous oxide and fluothane or with fluothane alone seemed to recover consciousness rapidly (10-15 minutes) and quietly. Nausea and vomiting appear to be infrequent. In patients anesthetized deeply with fluothane, recovery may be prolonged, although probably not so much as is the case with deep ether anesthesia.

Analgesia

According to Bryce-Smith and O' Brien⁵ the in-

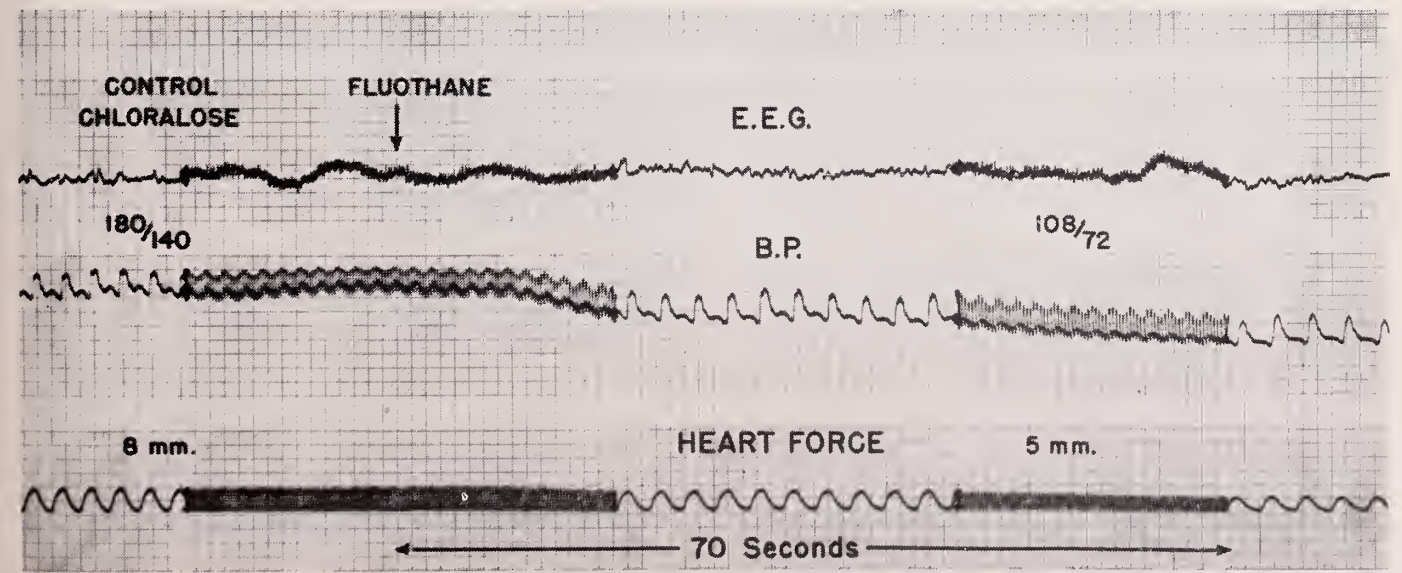


Figure 1: Rapid depression of Blood Pressure (B.P.) and Heart Force produced by inhalation of Fluothane. No appreciable change in electroencephalogram (E.E.G.) Dog, 12.5 kg., chloralose anesthesia.

EXPERIENCES WITH FLUOTHANE / Davis

halation of fluothane in concentrations of 0.5 per cent produces a definite sensory depression but results in little if any analgesia.

Discussion

There is certainly a great need for a good non-flammable anesthetic agent. Chloroform has been rejected by most anesthesiologists. Nitrous oxide, barbiturates, and muscle relaxants perform quite satisfactorily in many circumstances but have, admittedly, their drawbacks. Other nonflammable agents have failed to meet the test of time. Whether or not fluothane will survive is yet questionable. Although this drug has much to recommend it, at the present time it must be considered to be a very potent and dangerous drug whose use should be reserved for the *skilled anesthetists*. At the present time, vaporizers which are capable of delivering concentrations of fluothane vapor with sufficiently accurate control are not available. If a drug is so potent that minute increases in concentration produce profound hypotension, if large doses of atropine are required to prevent circulatory depression, if it depressed myocardial function to the degree which preliminary work indicates, one might well question its usefulness particularly by individuals who are relatively unskilled in anesthesia. At the present time it is our strong feeling that fluothane should remain in the investigative stage until it has been evaluated more fully.

Summary

1. Fluothane is a fluorinated hydrocarbon of great anesthetic potency. It possesses the desirable characteristics of rapid induction and recovery, absence of disagreeable salivary secretion and bronchial spasm, is non-flammable, and at this stage seems to have little hepatic or renal toxicity.

2. It is so potent and so rapid in action that commonly employed vaporizers for liquid anesthetic agents are unsuitable for use with it.

3. Fluothane anesthesia is commonly accompanied by hypotension and bradycardia. These effects have been attributed to peripheral vasodilation, but at this point there are indications that it is a very potent myocardial depressant as well.

4. Because of these disadvantages, it is recommended that fluothane be used only by skilled anesthetists in carefully selected cases.

North Carolina School of Medicine

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POISON CENTERS TO BE ESTABLISHED IN GEORGIA

A NETWORK OF POISON information centers will be established in Georgia according to preliminary plans which have the approval of the Georgia Department of Public Health and Rural Health Committee of the Medical Association of Georgia.

Several states already have similar poison information programs underway.

Tentative plans recommend that poison information centers be located in five Georgia cities. If needs indicate, information centers will be established in other cities to serve on a regional basis. "Treatment" centers (sub-centers) may also be established to serve communities.

These centers are to be a service for physicians and hospitals only and will provide information on contents of poisons as well as recommended treatment. This source of information and advice is to be available around-the-clock; seven days a week, with professional personnel (physician, nurse or

pharmacist) on duty.

The Health Department plans to equip information centers with a card file and reference books, which, according to experience elsewhere in the nation, will provide necessary information on the vast majority of poisoning cases. In the event of special problems involving products or unusual complications, special consultants are to be available to the centers. The state's two medical schools are also expected to be a resource.

While the primary purpose of these centers is to provide information on poison, an important part of the program will be the accumulation of data concerning the poison products most frequently involved in poisoning in Georgia. Through study of this information and study of the circumstances associated with the poisoning cases coming to the attention of the center it is hoped that an effective preventive program can be developed.

THE CHALLENGE OF FISTULA-IN-ANO

The entire subject is reviewed, and practical measures are suggested for prevention and treatment of this undesirable complication of ano-rectal infection.

LEONARD J. RABHAN, M.D., Savannah, Ga.

THE CHALLENGE OF THE Fistula-in-Ano is one of prevention and cure. The best service we physicians can give our patients is the prevention of disease. The next best is the cure, if possible, without serious complications. Should these take place regardless of our ablest efforts, we should then try to rectify these complications. Nowhere in the body is the above better illustrated than in ano-rectal infections and fistulae. A fistula-in-ano is an undesirable result from an anal infection. True, some patients who have fistulae will not remember having had an anal infection. A few may even deny having had one. The fact is, that ano-rectal fistulae follow infections in the ano-rectum. About 85 per cent result from primary infection in the crypts. The others are secondary anal infections from anal fissures, trauma, or systemic body infections, such as syphilis, T.B.C., ulcerative colitis, lymphopathia venereum or cancer.

Etiology

The anal crypts are located at the dentate or pectinate line. They are indentations caused by the puckering or purse-stringing of the mucosa of the rectum as it joins the anal canal. See (Number 1) Figures A & B. At the base of these crypts are the preformed anal glands. The exact nature and function of these glands is not known. Perhaps they are inclusion glands with only a secondary opening into the base of the crypt. The anal crypts are the starting places for anal infections. The etiology of cryptitis is a deficiency state in the individual with a lowered local resistance at the crypt, resulting in a breakdown and abscess formation. I believe that the process of cryptitis is a chronic one; that the process is one that continues for a relatively long time, with partial healing, and partial breakdown. We, as physicians, should help to correct all deficiency states and help to reduce the tension states in our patients. We will then minimize anal infections. Patients who are under tension may cause an increase in the secretion of these anal inclusion glands. With this increase in pressure, the glands ulcerate and a break through of infection into the surrounding tissue results.

The time to drain any infection around the ano-rectum is as quickly as possible. The sooner an anal abscess is widely drained the less damage will be done, the less burrowing of sinuses into fatty tissue and the more favorable will the sinus tract be. The challenge is for us to drain all pockets of pus as soon as diagnosed and not to wait until the abscess "points," or until the abscess has undermined the skin to the extent that the red rosy cover is about ready to separate and disgorge its contents into the outside world. As soon as an abscess is surgically drained, or bursts by itself, a fistula results. Whenever a physician drains an abscess about the anus, he should tell the patient that he is draining an abscess and that a fistula may result. If we do not tell our patients that they may need another operation for definitive care, we are not giving our patients all the information they are entitled to know. If the abscess forms submucously or near Hilton's Inter Sphincteric Line (Number 3 and 4) Figures A and B, a low level fistula results. About 75 per cent of all ano-rectal fistulae are of this low lying anal type. Usually in anal infections, the peri-anal and ischio-anal spaces are involved. The submucous, retro-rectal and pelvi-rectal are less often involved.

Deep and extensive fistula (Number 2) Figures A and B are the result of delay in opening a peri-rectal abscess—allowing it to spread through the space beneath the ano—coccygeal tendon to form a horseshoe abscess; failure to recognize a supra-levator abscess; and failure to recognize that a foreign body injured the rectal wall.

Early and adequate drainage of an ano-rectal abscess is a preventative for the formation of an ano-rectal fistula. The excision of deep anal fissures and ulcerative anal hemorrhoids will prevent subsequent fistulae formation.

Definition

An ano-rectal fistula is an abnormal opening from the ano-rectal canal to the outside skin. On rare occasions the abscess and fistula opening may be from the anal canal to some neighboring organ as intestine, bladder, or vagina. An abscess precedes

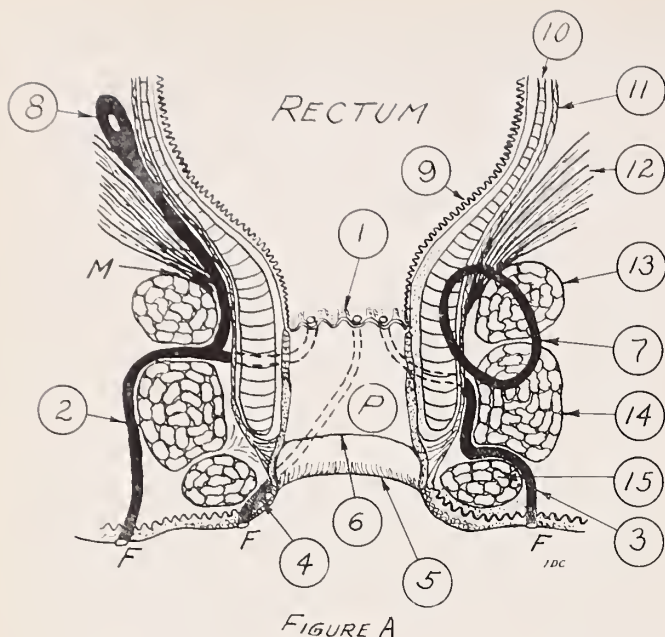


FIGURE A

FIGURE B—TRANSVERSE SECTION →

- (9). MUCOSA AND SUB-MUCOSA OF RECTUM.
- (10). INTERNAL SPHINCTER MUSCLE—is the thickened partian of the inner circular fibres of the calar at the terminal end.
- (11). OUTER LONGITUDINAL M. LAYER OF THE COLON.
- (12). LEVATOR ANI MUSCLE—Puba-caccygeaus Portian along with the puba-rectalis part at (M).
- (13). DEEP PORTION.
- (14). SUPERFICIALPORTION.
- (15). SUBCUTANEOUS PORTION.
Of External Sphincter ani Muscle.
- (R). MUCOSA AND SUBMUCOSA OF RECTUM.
- (M). PUBO-RECTALIS M.
- (F). SECONDARY OPENING OF FISTULAE ONTO THE SKIN.
- (P). PECTINATE AREA OR PECTEN BAND. Subcutaneous band of fibraus like tissue. This area extend fram the pectinate line superiorly to about the level af Hiltan's Line. Note that the entire anal canal fram the ana-cutaneous line (Na. 5) ta pectinate line (No. 1) is lined by skin and modified skin. The length of the anal canal is about 1 3/8". The axis af the anal canal, if extended, wauld intersect the umbilicus.
- (R.W.) RECTAL WALL. Nate: The acute angle farmed by the junction af the anal canal with the rectum.

an inflammatory anal fistula. The abscess starts at the anal crypt at the pectinate line (Number 1) Figures A and B. This is the primary opening. The secondary opening is the one at the other end of the tract, usually at the skin margin. The majority (about 85 per cent) of ano-rectal fistulae start as abscesses in anal crypts. Other causes are systemic body infections, cancer, or foreign body damage to the rectal wall. An anal fistula involves the anal canal; a rectal fistula, the rectal canal. Most ano-rectal fistulae are anal fistulae.

Problem

Having incurred a fistula, the problem is to cure the fistula, avoiding a recurrence and incontinence. Do not cut the so called critical angle or circle (Number 7) Figure A. If the deep sphincter be involved, do a stage operation with a seton. The

← FIGURE A—LONGITUDINAL SECTION.

- (1). PECTINATE LINE. This line marks the junction af the meeting af the Proctadeum (ectadermal layer) with the down-growth af the Hindgut (enda-dermal layer). This takes place about the 4th manth af fetal life. It is the ana-rectal line ar dentate line.
- (2). HIGH LEVEL FISTULOUS TRACT. Fram the crypt line the tract breaks thru between the superficial partions af the external sphincter muscle. A communicating limb is shown going up ta the supra-levator ta form an abscess. (See Na. 8).
- (3). LOW LEVEL FISTULOUS TRACT. Fram the crypt line the tract breaks thru between the superficial and subcutaneous partion af the external sphincter muscle. This break thru takes place near Hiltan's White Line. About 75% af ana-rectal fistulae are this type.
- (4). SUBMUCOSA FISTULOUS TRACT. Very superficial.
- (5). ANO-CUTANEOUS LINE. This line marks the junction af the anal canal with the outside skin.
- (6). HILTON'S WHITE LINE. This marks hte junction af the external and internal sphincter muscles.
- (7). ANO-RECTAL RING. This is a muscular ring that encircles the anal canal. It is campased af a fusian af the internal sphincter M., longitudinal M., pubo-rectalis M., marked (M) on Figure B, and the deep external sprincter.
- (8). SUPRA-LEVATOR SPACE ABSCESS, with drainage into rectum. (Figure B).

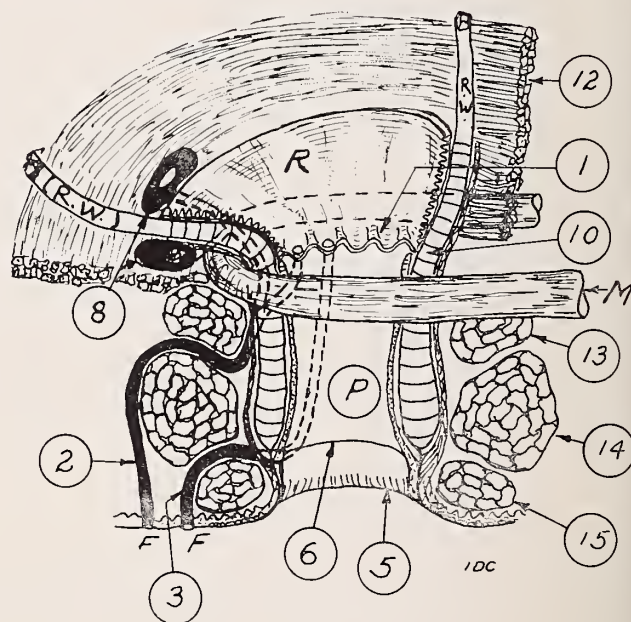


FIGURE B

primary opening must be found and the entire tract removed.

It is well at this place to pause and to emphasize that not all sinuses about the anal canal are ano-rectal fistulae. Usually all sinuses within a two inch radius about the anus are fistulae. However, a sinus may be a urethral fistula or a pilonidal sinus. Also to be considered are pyroderma and hidradenitis suppurativa.

Salmon or Goodsall Rule

If the skin (i.e. secondary) opening of a fistula is posterior to a line drawn transversely across the anal canal, the tract is curved and the primary opening is in a posterior crypt. If the secondary opening, i.e. the skin opening is anterior to the transverse line, the tract is radial to the anus and the primary opening will be found in a crypt on a line drawn straight between the openings. This rule holds true

most of the time, because that is the way the lymphatic spread takes place, and infections follow the lymphatic patterns.

Caution

At this point it is well to emphasize that in the presence of a diarrhea, or of a history of a recent diarrhea, do not attempt any fistula surgery. Do try to get the patient in as good physical condition as is possible. Fluid balance, anemia, avitaminosis, and any systemic disease must be controlled before surgery on any fistula is attempted. An anal abscess is to be opened as soon as possible; but a fistula should be repaired only under ideal optimum conditions.

Types

Low anal and subcutaneous types (Number 3 and 4) Figures A and B. About 75 per cent of anal fistulae are of this type. The tract runs superficially or the tract runs between the subcutaneous and the superficial portions of the external sphincter muscle, to enter a crypt at the pectinate line. This type of fistula is usually easy to cure. The ano-rectal ring need not be cut.

The high level type are the ones that cause trouble (Number 2) Figures A and B. They pass between the deep and superficial portion of the sphincter M. They may send up a limb to communicate with the supra-levator space, there to form an abscess (Number 8) Figures A and B, and even to communicate with the rectal canal.

Critical Circle

This is a muscular ring (Number 7) Figure A that encircles the junction of the anal canal and rectum. It is composed of a fusion of the internal sphincter M., longitudinal M., the pubo-rectalis M., and the deep external sphincter M. Posteriorly, it is thicker and higher. Anteriorly, it is lower and thinner because the pubo-rectalis M. is absent at this point Figure B. If this muscular ring be divided, incontinence results, if the ends do not unite when healing takes place.

Treatment

Once you are certain that a fistula is present, the primary opening should be looked for at the pectinate line. The secondary opening is larger than the primary opening. Careful search must be made for the primary opening. Usually a small drop of pus can be extruded if the area is gently kneaded. Use a small lachrymal duct probe or hypodermic needle wire to find the opening, by careful search in the area of the pectinate line as suggested by Goodsall's rule. Do not push a probe from the skin opening into the anal canal or rectum. This is a good

way to make a false passage and may lead to a recurrence. Unless the primary opening be found, a non-cure may result. Once the primary opening is found the entire tract must be opened. Secondary tracts must be watched for and opened. Wipe away all granulation tissue in the tract with a gauze sponge to be certain that a branch tract is not over-looked. The tract can be seen and felt. The use of dyes is not necessary, and may lead to confusion. The contiguous area on each side of the anal crypt is removed. The edges of the fistulous tract are cut back and saucerized to remove all infected tissue and to insure that the wound will heal from the bottom upward. The resulting wound should be a flat wound so that no bridging will occur. Always try to cut the sphincter M. at right angle to the fibres.

Multiple Openings of Fistulae

If there be openings on both lateral sides, the chances are that two fistulae are present, and one should try to find the two primary openings. If the openings are posterior, or if both are on one side, probably only one fistula exists. Each opening communicates with the one primary opening, usually in the posterior midline. Open the tracts widely.

If the Critical Circle (Number 7) Figure A be involved, do a stage operation. Remove all infected tissue up to the pubo-rectalis portion of the circle. Place a black silk suture loosely to act as a seton. When the wound has healed sufficiently for scar tissue to fix the muscle so that it will not retract, the rest of the muscle bundle can then be cut using the seton as a marker. This second stage can be done as a minor procedure in about three weeks.

In the literature various authors give an incidence of 7-10 per cent of ano-rectal fistulae as being of tuberculous origin. In a series of 252 fistulas no evidence of tuberculosis was found by the writer. The only explanation our local pathologists can give is that we have practically no bovine tuberculosis; hence, we have little intestinal tuberculosis, and because of this we have little involvement of T.B.C. in our fistulae. If tuberculosis be found in the anal-rectal fistulae, it most probably will be found elsewhere in the body—most commonly in the lungs. The low lying tubercular fistulae can be opened and saucerized cutting the superficial sphincter M. The deep types should not be cut, but any abscesses should be widely drained. There is usually very little induration or thickening of the tissues in a tubercular fistula. And if there be considerable induration, one should suspect malignancy. All tissue removed should be examined by the pathologist.

In the presence of complicating, draining, discharging sinuses in an ill patient, a colostomy may

be necessary before any fistula repair is attempted. Inject with lipiodol and x-ray the tracts to determine the extent of the fistula. A fistula operation is rarely an emergency operation. Improve the patient's condition before any fistula operation is undertaken.

Causes of Failure

Failure to find the primary opening; suture of wound edges; the collateral branches were not all opened; packing of tract to keep it open. The wound edges should be cut back and a flat wound should be the result, so that the wound in the canal will not heal before the outside wound heals; cutting the critical angle and not recognizing it; inadequate post-operative care. The wounds have to heal from the bottom up, and no bridging must be allowed to take place.

Complications

Anal stricture and incontinence are the two most frequent undesirable end products of a fistula or of the attempt at repair or cure of a fistula, and the failure to cure a fistula may be classified as a complication.

Stricture is more likely to result from an ulcerative process that was not recognized at time of operation. The most common are lymphopathia venereum, ulcerative colitis, syphilis, or any chronic ulcerative condition. The secondary fibrosis resulting in the repair causes a narrowing of the orifice with stricture formation. If the process be narrow, an annular stricture results; if the process involves more than two and one half cm. in length a tubular stricture results. Gentle, continuous dilatation will minimize the deformity. If, after the process has quieted down, the stricture be disabling, radial incisions to relax the scar tissue may be useful. Continuous dilatation should be done to insure proper healing. If the sphincter muscles be involved, a colostomy may be needed. However, each case has to be individualized. So much for stricture, and it may be quite a problem.

In discussing incontinence the following facts must be kept in mind. The column of stool rests in the hollow of the sacrum, so that there is little pressure on the pectinate line. The anal sphincters are under voluntary control and can remain contracted tightly for only a relatively short time. There is a tone contraction because of the sling action of the puborectalis M. and the inherent tonicity of the sphincter musculature.

The anal canal joins the rectum at a sharp angle. Figure B. The sigmoid acts as the reservoir for the stool, and only when there is a fair amount of stool present in the rectum is there enough pressure on the pectinate line to initiate the defecation reflex.

A repair for anal incontinence must restore the anal-rectal angle, restore the reservoir function of the rectum, and restore the continuity of the severed muscles of the sphincter mechanism (Figure B.) If the tear be anterior, or in the lateral quadrant, thorough freeing up of the ends of the muscles with union end-to-end under no tension will suffice. If the tear be in posterior midline the rectal reservoir in the hollow of the sacrum must be re-made, and the anal-rectal angle restored. All muscle ends must be completely freed and mobilized so there will be no tension on the suture line. The rectal wall is re-sutured, and then the sphincters are united, end-to-end, using interrupted sutures. The edges are approximated but left open for drainage.

Summary

Thus we have an approach for the problem of ano-rectal fistulae. As physicians we must meet the challenge. Institute preventative measures; promptly and adequately drain all anal infections. We must try to cure the ano-rectal fistula with one operation, if possible. We as physicians should heal our patients without leaving them with any residual scars to plague them.

314 E. Gaston St.

REPORT ON AAGP DALLAS ASSEMBLY

A RECORD NUMBER of the nation's General Practitioners flocked to Dallas last March to attend one of the most successful assemblies in the history of the Academy. Figures show that the registration surpassed last year's meeting by 1,320 persons. The new president elect of the AAGP is Fount Richardson of Fayetteville, Arkansas, while Charles Cooper of St. Paul, Minnesota, was elected vice president to succeed Georgia's Fred Simon-ton. T. A. Sappington of Thomaston, Ga., was a member of the Nominating Committee.

One of the highlights of the Congress of Delegates actions was a petition for Academy membership on the Joint Commission on Accreditation. Also adopted were four resolutions calling for Academy representation on

the JCAH. The general feeling was that the prestige and increased stature which would accrue to the Academy through commission membership would be invaluable.

One of the most debated subjects was the proposed establishment of a certifying board of general practice. The final decision of the Congress authorized the Board of Directors "to maintain liaison for preliminary planning with the General Practice Section of the AMA and the Advisory Board of Medical Specialties concerning establishment of a board."

A proposal that the Academy establish an educational and research foundation for the support of research on the medical and economic aspects of general practice was also endorsed by the Congress of Delegates.

DIABETIC ACIDOSIS: SOME PRINCIPLES OF TREATMENT

CLIFFORD F. GASTINEAU, M.D., Rochester, Minn.

IN SPITE OF THE availability of better insulins and the greater efforts in education of the diabetic patient, diabetic acidosis is still an all too frequent occurrence. Because our knowledge of carbohydrate and electrolyte metabolism is constantly increasing, it is important to review this subject periodically.

It is far easier to prevent acidosis than to treat it; and if situations likely to provoke ketosis are recognized, a serious degree of acidosis can often be avoided. Perhaps the most common history obtained from the relatives of a patient in diabetic acidosis is that the patient had symptoms such as nausea, vomiting, or diarrhea, which were suggestive of mild gastroenteritis. The patient, having been unable to eat, then had omitted the usual dose of insulin for fear of hypoglycemia. Within hours, glycosuria, polyuria, thirst, and the other symptoms of acidosis made their appearance. Careful instruction of patients concerning use of insulin and the importance of seeking medical advice in even minor respiratory and gastrointestinal illnesses will do much to prevent such episodes.

The requirement for insulin may be increased considerably in a variety of forms of stress. An exacerbation of diabetes is likely after fractures, myocardial infarctions, and surgical operations. Thyroidectomy for Graves' disease is particularly likely to cause a considerable increase in the requirement for insulin.

Insulin reactions, paradoxically, may sometimes be followed by clinically significant ketosis.¹² Previously unrecognized diabetes may be responsible for the acidosis, and this possibility always should be kept in mind when one is faced with a comatose patient. Rarely, a diabetic may develop such psychologic problems that he allows acidosis to develop at frequent intervals. This has been termed "tautologous diabetic acidosis,"^{3,10} and serious psychiatric difficulties may be suspected in the patient with repeated acidotic episodes. An increased intake of sugar or carbohydrate ordinarily will not provoke acidosis in patients following current diabetic programs; indeed, ketosis may actually diminish while

This frequently unrecognized complication of diabetes remains a serious threat to life in spite of our recent advances in therapy.

glycosuria increases under these circumstances.

In spite of efforts at prevention, diabetic acidosis remains a common problem of treatment. It cannot be divorced from medicine in general, as it frequently is associated with other diseases which may prove more serious threats to life than the acidosis. If a middle-aged patient with mild and easily controlled diabetes suddenly becomes acidotic, a myocardial infarction with minimal symptoms may be suspected. If there is appreciable fever, a search should be made for an infection such as pneumonia, because diabetic acidosis ordinarily does not cause significant elevation of temperature.

A common approach to the treatment of diabetic acidosis is the construction of a composite picture of a typical patient. Then generalizations are made with regard to dosage of insulin and amounts of water and electrolytes needed to restore deficits. This approach is open to criticism because the pattern of disturbances of metabolic functions may vary considerably from patient to patient. The presence of an associated illness, the rapidity with which the acidosis developed, the amount of electrolytes lost through vomiting, the amount of water and food ingested, and the severity of the underlying diabetes are variables which contribute to differences in the problems presented by various patients. No stereotyped scheme of treatment will provide optimal results.

Patients with acidosis of moderate severity will survive if treated by any of several methods, but those with increasingly severe acidosis seem to approach a point of irreversibility beyond which no amount of knowledge will bring successful results. As the severity of the acidosis approaches this point, the margin of error permitted the physician becomes less and less; and in severe acidosis the treatment must be adapted to the needs of the moment with a maximum of precision.

One of the major problems in the care of patients

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of all sorts is the keeping of intelligible records. In the treatment of diabetic acidosis a running account of treatment given and the response of the patient both clinically and chemically is a necessity. A tabular form should be devised on which can be recorded such items as the concentrations of glucose and electrolytes in the blood, the amounts of insulin given, the amounts and types of electrolyte solutions given, and the physical condition of the patient. Entries may be required at intervals of a few minutes when events are moving rapidly, for only by an easily comprehended record such as this can the physician evaluate response to treatment and plan appropriate modifications of it.

In spite of the criticism of the concept of an average case of diabetic acidosis, some generalizations must be made. Insulin is the immediate need. It should be administered initially in doses proportional to the severity of the acidosis; and severity is estimated by such factors as depth of unconsciousness, duration of coma, and presence of associated illnesses.⁵ The initial value for blood sugar is not a good guide to the insulin requirement. Subsequent insulin dosage will depend on the response of the concentration of blood sugar and of the patient as a whole. The initial dose usually will be of the order of 100 to 400 units, and not infrequently the total amount given will exceed 1,000 units.

Extensive studies have been carried out to determine the size of the deficits of electrolytes and of water.^{1,4,8,9} These studies usually have depended on the amounts of various substances retained during the period of recovery from acidosis. In most of the data a rather wide variation from patient to patient in the size of the electrolyte deficits is apparent.

Sodium may be lost in amounts varying from 200 to 1,000 mEq. Chloride deficits usually are estimated as somewhat smaller. Although physiologic saline solution has been used effectively in the treatment of diabetic acidosis, it supplies an excessive amount of chloride ion which tends to cause hyperchloremia, and possibly may lower the pH of the blood.^{11,13} The use of solutions containing lactate or bicarbonate ions has been debated for many years, but it seems justifiable to use solutions containing sodium and chloride in approximately the proportions in which they are found in the plasma, with the balance of the anions being lactate. Kety has presented evidence that Kussmaul's respirations are the result of a fall in pH of the blood;⁷ the use of small amounts of more alkaline solutions may restore a more nearly normal pattern of respirations, thus relieving the patient of a considerable work load.

During the first hours of treatment glycosuria will continue and therefore excretion of water, sodium, and chloride will be increased.³ Accordingly, the amounts of water, sodium, and chloride needed during the first 12 to 24 hours will be greater than the deficits at the beginning of treatment.

As the level of the blood sugar falls, water moves into the cells to maintain osmotic relationships, and proportionately more water than sodium is needed. This is the basis for the common recommendation that hypotonic solutions be used.

Concentrations of phosphorus and potassium in the plasma are normal or sometimes elevated at the beginning of treatment, but usually fall within a few hours as insulin begins to act. In a rare case generalized muscular weakness will be encountered from a subnormal concentration of serum potassium. On the other hand, gastrointestinal atony is a common symptom in diabetic acidosis and has been ascribed to hypokalemia.⁶ No clinical syndrome has been described as resulting from low concentrations of serum phosphorus. Both potassium and phosphorus play important roles in cellular metabolism, however, and restoration of these cations may improve cellular metabolism and aid recovery in a nonspecific manner. Deficits of potassium have been estimated at from 100 to 400 mEq., and deficits of phosphorus are perhaps half as large or less. Caution should be used in administering solutions containing potassium because of potential toxic effects, but in general 50 to 200 mEq. of potassium may be given intravenously over a period of six to 12 hours beginning two or three hours after initiation of treatment with insulin. Ideally the level of potassium should be determined recurrently by chemical analysis, and the rate of administration should be modified accordingly. This ordinarily is not possible; but serial electrocardiograms are helpful in estimation of the potassium in the serum. A rapid rate of formation of urine lessens the hazard from administration of potassium, while oliguria should make the physician very cautious in his use of it. Since the fall in concentration of phosphorus parallels that of potassium, the two ions usually are administered as buffered potassium phosphate, although the amount of potassium required is somewhat greater than the amount of phosphorus. After the patient is beginning to recover, potassium may be administered in food; but in the early hours of severe acidosis, gastric atony makes the oral route an uncertain one. Thus in those instances in which potassium therapy is most important, the gastric route is least dependable.

Magnesium deficits may prove significant, but the advantages of administering magnesium are not proved as yet.

Much has been written about the use of glucose in the treatment of diabetic acidosis. It appears, however, that additional glucose would be of relatively little value in the early hours of treatment and might do harm by increasing the loss of water and electrolytes in the urine. As the level of glucose in the blood falls during later hours, glucose must be administered to prevent hypoglycemia and to serve as a source of energy. The hazard of hypoglycemia is a real one and must be considered as a possible cause of unconsciousness occurring either at the beginning or in the course of treatment. Fructose offers a theoretic advantage in that it can be utilized without the intervention of insulin. It shares with glucose the disadvantage of intensifying diuresis and dehydration of the cells if administered early in treatment. Interpretation of values of blood sugar is made more difficult by the administration of fructose, since conventional tests for blood sugar measure the total reducing power of both sugars and since fructose is of lesser value in preventing or correcting symptoms of hypoglycemia (hypoglycemia). Thus it is conceivable that a patient could be suffering from hypoglycemia as a result of receiving insulin while the "blood glucose" levels were made normal or elevated by administration of fructose at the moment.

Many formulas for electrolyte solutions have been devised for the treatment of diabetic acidosis, and it is difficult to say that any one is much worse or better than the rest. If excessive amounts of any ion are given, in most situations there is a prompt disposal of that excess via the urine. In severe acidosis, however, such homeostatic mechanisms are impaired,² and improper selection of the electrolyte solution may have adverse effects.

It is suggested that a moderately hypotonic solution of sodium and chloride be used in the first two or three hours of treatment. Such a solution

might be made by adding a 40 mEq. ampule of sodium lactate to one liter of 0.45 per cent solution of sodium chloride, thus producing a solution of 75 mEq. of chloride, 40 mEq. of lactate, and 115 mEq. of sodium ions per liter. Potassium phosphate, potassium chloride, and glucose can be added to this solution in the later hours. In fluids given parenterally, it usually is well to avoid concentrations of more than 40 mEq. of potassium per liter.

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Attend the 1958 Annual Session Medical Association of Georgia

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THE NEW GRADY MEMORIAL HOSPITAL,

Atlanta, Georgia

IN THE LATE 1880's, the city of Atlanta and its environs had no public hospital. The lack of this facility was a great handicap to our community.

Henry W. Grady was born in Athens, Georgia, in 1851, and died in Atlanta, Georgia, at the age of 38 years in 1889. As a public spirited man and an Editor of *The Atlanta Constitution*, he waged an unrelenting and determined campaign for a public hospital to serve the citizens of Atlanta, so that our indigent sick could receive proper medical care.

A fund for such a hospital was raised by popular subscription, and the building was begun shortly after Mr. Grady's death, and was completed in the latter part of 1891. It was opened to the public in January, 1892. Quite naturally it was named in honor of its sponsor, and since its erection has been known as the Henry W. Grady Memorial Hospital.

In a span of 15 to 18 years, it was found that the original hospital was utterly inadequate; so under the leadership of Mr. Robert F. Maddox, Mayor of the City of Atlanta, the city passed a bond issue in the amount of \$100,000 in 1910. Upon completion of the building, Grady Memorial Hospital had a bed capacity of 110.

It was soon found, however, that this hospital was also inadequate; so the buildings across the street, owned by Emory University and formerly occupied by Atlanta Medical College and Southern Medical College, were leased for \$1.00 a year to Grady Memorial Hospital. These buildings were converted into the public hospital for Negroes, and the buildings across the street were used as a public hospital for white people.

These buildings also proved inadequate, and other additions were made, both to the facilities serving



NEW GRADY MEMORIAL / continued

the white people and to those serving the Negroes.

The hospital was owned by the city of Atlanta and was operated and financed by it. Fulton County had made no provision for hospitalization of its indigent ill who resided out of the city limits, and DeKalb County was in a like situation, having no facilities for the treatment of the indigent ill residing in DeKalb County.

It was at this time that the late Mr. Thomas K. Glenn began to make plans for the future, and after many years of discouragement and hard work, the Fulton-DeKalb Hospital Authority, created by statute and by a constitutional amendment, was activated. Under the new plan, the Commissioners of Roads and Revenues of Fulton and DeKalb Counties did establish a Hospital Authority, giving its Trustees broad powers. This Hospital Authority, under the leadership of Mr. Glenn, began to function October 1, 1945, when the city of Atlanta deeded the Grady Memorial Hospital to The Fulton-DeKalb Hospital Authority, and the Authority took over the function of providing hospitalization for the indigent ill in both Fulton and DeKalb Counties.

At that time the facilities were woefully inadequate, and the Trustees of the Hospital Authority embarked upon an educational program, selling to the citizens of the two counties and to the duly constituted officers the idea of building a new general public hospital which would look after the needs of the indigent ill in these two counties for the next 30 or 40 years.

This new Henry Grady Memorial Hospital has been completed, and we have no hesitancy in saying that at the present time it is the finest and best equipped hospital building in the entire country.

This new building was dedicated in January, 1958, and was the culmination of the plans of the Hospital Authority, of the County Commissioners, and of all of the citizens of the two counties.

For many years, and long before the creation of the Fulton-DeKalb Hospital Authority, Emory University School of Medicine, under a working arrangement with the authorities at Grady Memorial Hospital, has had charge of the patient-care at the hospital. In our hospital, Emory University conducts its teaching program under the supervision of its experienced and gifted chiefs of the various services, and the care of our patients is as good as can be had anywhere, taking into account the financial limitations of both the Medical School and the Hospital Authority.

The Trustees are aware of the fact that our new hospital will create difficulties, and that it will require more money to operate than the old facilities. We

are also aware of the fact that as Fulton and DeKalb Counties continue to grow and expand in population to an almost unbelievable extent, our patient load will increase and that the expense of operation will increase in proportion.

It is the function of the Trustees of the Hospital Authority to provide the best possible medical services to the persons entrusted to our care. The best possible medical services must be provided in a *teaching hospital*, and Grady Memorial Hospital is fortunate and its patients are fortunate in that it is a teaching hospital under the direction of Emory University School of Medicine.

The Trustees of the Hospital Authority are also very fortunate in having a visiting staff which is composed of practically all of the members of the medical profession in Fulton and DeKalb Counties—all gifted men—many of them consecrated to the duty of rendering service without compensation to our indigent sick people. The members of our visiting staff work and cooperate, of course, with Emory University School of Medicine, which has the direction of the medical care of our patients.

The Trustees of the Hospital Authority were fortunate in letting the contract and starting the construction of the building in 1954. The over-all cost of the new hospital, including its equipment and the cost of building the steam plant, approximates \$26,000,000. Had the Trustees delayed going forward with the project in 1954, the cost today would be 20 to 25 per cent greater and we would not have had the money with which to do the job.

For eight years prior to the beginning of the work, the Hospital Authority had conserved its assets, and due to the liberality of Fulton and DeKalb Counties we had been able to lay aside several million dollars. Now we have at least \$28,000,000 worth of assets and owe \$20,000,000 revenue certificates which were dated February 1, 1954, and which were sold at that time at an annual interest rate on the entire debt of 2.66 per cent.

We look forward hopefully to the future, and believe that our hospital, which in a pinch could provide 1250 or more beds for our patients, will serve the needs of our community, unless it outgrows all reasonable expectations, until approximately the year 2000.

We trust that you and the readers of your Journal and your entire organization, will continue your great and abiding interest in the duties which we are attempting to perform for our eligible patients at Grady Memorial Hospital.

Most sincerely yours,

TRUSTEES, THE FULTON-DeKALB
HOSPITAL AUTHORITY
HUGHES SPALDING, *Chairman*

A TOUR OF GRADY

HELEN L. HENDRY, *Journal Staff*

THE NEW GRADY Memorial Hospital is a massive structure rising 21 stories above the ground level and occupying an area of 26 acres. My tour through the new hospital was a revelation. Silhouetted against the black marble of the huge doorways, the white figures of Hippocrates and the goddess Hygeia afforded a dramatic introduction to the hospital. I had come to Grady for the purpose of collecting material for an article, and after this first impression, the idea seemed a bit breathtaking. Once inside the hospital, I was struck by the magnitude and the beauty of the main lobby. Flowers and plants, which are a permanent part of the decor, warm the efficient hospital atmosphere and make the place decidedly more cheerful.

At the main desk I met one of the Grady "Gray Ladies" who offered to guide me on a thorough tour of the hospital. On the first floor I visited the John Newton Goddard chapel, a memorial to this prominent Atlanta businessman and philanthropist. The chapel, designed by Philip Shutze, resembles a small New England church. Above the beautiful altar, the Ten Commandments are inscribed in gold. Wine-colored curtains combine with the gold candelabra to give an air of simple elegance. Services are held each Sunday for staff and patients, and the chapel is always open for use by families of patients in the hospital.

Also on the first floor are the administrative offices. The office of Mr. Frank Wilson, superintendent of the hospital, is very tastefully decorated, as are the other executive offices. Nineteen automatic elevators are in continuous operation and provide a marked contrast to the elevators in the old Grady. Enormous file rooms give adequate space for storing patients' records. Dumbwaiters and a pneumatic tube

system facilitate transmission of articles from floor to floor.

There are three beautiful dining halls and seven kitchens on various floors. Food is brought from a central kitchen in heated and refrigerated carts to the seven smaller kitchens. There is also a special diet kitchen and a room used specifically for preparation of vegetables. In describing the advantages of the new facilities, the chief dietitian stated, "The old Grady facilities were so inadequate that I don't see how we ever got along. Now, new vegetable steamers, mixers, a steam jacket kettle, electric ovens, and adequate refrigeration compose only a few of our new additions."

No tour of Grady could be complete without a trip to the emergency clinic. I had remembered the old clinic as a dismal, dingy place where patients of all types were shunted into dimly-lit hallways. The new clinic seemed an almost unbelievable change. Wide spacious halls and well-equipped rooms are available to accomodate any accident or other type case.

In the obstetric ward I became increasingly aware

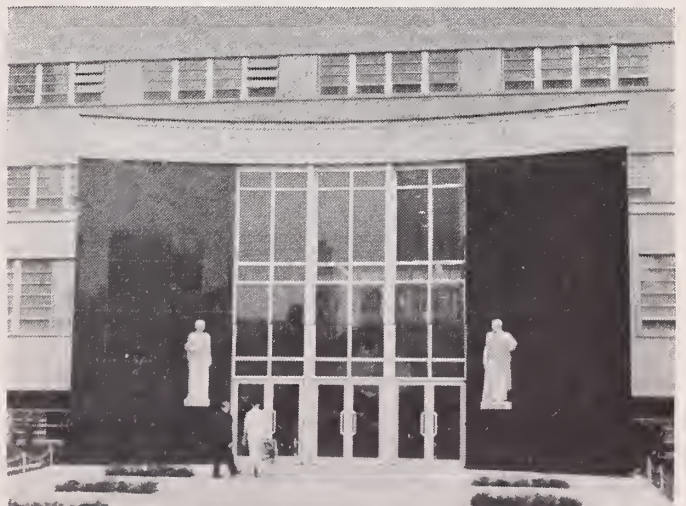


Figure 1: Main entrance to the new Grady Memorial Hospital. Sculptured figures of Hippocrates and Hygeia guard the doorway.

The staff of the JOURNAL wishes to thank Miss Margaret Stovall, Dean A. P. Richardson, Mr. Frank Wilson, and Mrs. Frances Hammett for their cooperation in providing material for this feature.

Photos in this article were taken by Ted F. Leigh, M.D., and Mr. Joe Jackson.

GRADY / Continued

of the contrast between the new and the old. Pastel-colored walls give a cheerful air. Flowers are placed in every room, and music is played over the loud-speaker system. The atmosphere is one of relaxa-



Figure 2: Stairways leading from main entrance to lobby. Montage depicts threefold purpose of Grady—Research, patient care, teaching.

tion. In all the wards, rooms vary in size from singles to areas of eight beds. These beds are the finest available, and oxygen outlets are adjacent to each unit.

The complexity of the patient care at Grady is surprising, and much actually depends upon volunteer services from individuals and charity organizations. The Red Cross Gray Ladies make the patient's stay more comfortable, and see that he is provided



Figure 3: Two of the 19 automatic elevators in the new hospital. The old building contained only two.

with toilet articles, books, magazines, games, etc. While touring one of the wards, I saw students from a barber college giving free haircuts, shaves, shampoos, sets and permanents to patients. Teachers

are provided by the Fulton County and Atlanta Boards of Education to teach children in the hospital and to supervise their recreation.

It was obvious that the nurses, residents, and hospital personnel were enthusiastic about their beautiful but still unfamiliar surroundings. In talking with these people about the numerous items of new and expensive equipment, I asked the stock question: "What do you think of the new Grady and how does it compare with the old in facilities?" "There's just no comparison, just none at all," was the repeated reply. "This equipment is so far superior to anything we've had that it is a pleasure to work here," voiced the chief resident of the radiology department as he pointed out a new X-Ray machine and other new pieces of apparatus in the department. "Not only do these facilities make work more pleasant," I was told, "but they increase the efficiency of patient management and the speed and accuracy of diagnoses and treatment."

Frances L. Hammett, Director of Nursing, told how the new equipment has helped the nursing staff.



Figure 4: Shown here is the office of Mr. Frank Wilson, Superintendent of the hospital. His office is typical of the other beautiful administrative rooms on the first floor.

"The mechanical apparatus such as the pneumatic tube system and the dumbwaiters have enabled us to transport supplies more efficiently. This means that personnel may remain on a given floor throughout their period of duty. The new Grady Hospital affords unlimited opportunities for us to realize that timesaving apparatus can be utilized for more adequate nursing care. The design assures efficiency by the use of centrally located utility areas, including kitchens and laboratories. Certainly in the building of this hospital," Mrs. Hammett continued, "the beneficiary, the patient, was in the mind of the designer."

Mr. Wilson, superintendent of Grady Hospital, told me that the completion of the new hospital was only "the first step in plans formulated many years ago by the Fulton-DeKalb Hospital Authority when it pledged itself, in addition to providing and maintaining proper facilities to take care of the

indigent sick of Fulton and DeKalb Counties, to create and operate a modern medical center, and to foster and sponsor medical research for the bene-



Figure 5: The beautiful John Newton Goddard chapel is the first that Grady has ever had. Services are held on Sunday for both staff and patients.

fit of the two counties and their environs. The hospital was designed with the foresight of accomodating a community of one million. While there are 1,100 beds and 325 bassinets available, only 750—the capacity of the old hospital—are being used at the present time.”

When Mr. Wilson described various plans considered for further improving facilities and for enlarging the staff, I could well understand his statement that the completion of the new hospital was only a “first step.” With increased facilities, Grady



Figure 6: Scene of the new main kitchen showing some of the many new additions. The new building has seven small kitchens on various floors.

is now interested in providing the necessary staff and personnel to meet the growing patient load. The hospital is stepping up its recruitment program for

students in the four schools which it operates—Professional Nursing, Practical Nursing, Medical Technology, and X-Ray Technology. Mr. Wilson explained that the hospital hopes to have an enrollment of 500 students in the School of Nursing when adequate facilities are available. At present, the enrollment totals 350. He also expressed the hope that with the “excellent experience which Grady affords with its enlarged and up-to-date facilities, coupled with the attractive living quarters for house staff members, more and more doctors will become interested in Intern and Resident positions in the hospital.”

I asked Mr. Wilson what will be the fate of the old Grady buildings which now stand unoccupied. “All plans concerning the old buildings are still in the working,” Mr. Wilson replied. “They are all probabilities and will depend on what financial support the hospital receives. Provided adequate finances, the Hospital Authority will take steps to



Figure 7: Each ward contains a nurses' station similar to the one shown here. In the far ground, the pneumatic tube system can be seen.

tear down the old Negro hospital for parking area or recreational space. The old white clinic will be demolished and the space used for recreation, specifically for the white nurses. The hospital also hopes to build a home for its Negro nurses in the area where the old lab building now stands, and make a recreation area for them between the two nurses' home. The old white hospital is still a good building,” Mr. Wilson states, “and it will probably be remodeled for white personnel. The isolation unit is now being remodeled for white nurses. The Gray Clinic on Armstrong Street is too good to be wrecked, and will be used for either research or housing Negro nurses. The Steiner Building will be remodeled and used by the Nursing School.

“Another hope of the hospital is that the Fulton County Health Building will be erected near the area occupied by the Thomas Glenn Building. This would enable the hospital to have a psychiatric and tuber-

GRADY / Continued

culosis service working in conjunction with the State Board of Health. Effective July 1, there will be a small charge for medicines and out-patient clinic



Figure 8: Grady's famed emergency ward is equipped to take care of any case from a minor cut to a serious automobile accident. The new ward contains rooms for treatment of shock, accident, asthma cases, and serious infections. Here little Ronnie Sikes of Atlanta watches dubiously while Nurse Danice Wheeler removes the bandage from a cut elbow.

visits," Mr. Wilson states. "These fees will help supplement the tax money provided by Fulton and DeKalb Counties for support of the hospital."

After speaking with Mr. Wilson, it became evident that the overall hospital plan was not ultimately completed in January, 1958. Rather, it stands as a constantly evolving facility for future generations.



Figure 9: These new beds are one of the many additions in the pediatrics ward. Here, one of the Red Cross Nurses checks on a young patient.

"Having our modern and spacious facilities and the continued cooperation of Emory University Medical School, the staff of volunteer physicians, as well as

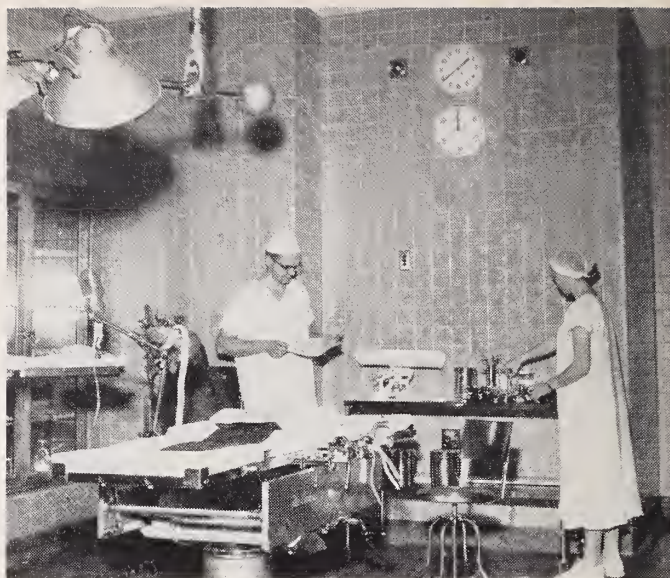


Figure 10: Inside one of the delivery rooms, a Grady resident and nurse prepare for a patient. This room contains all new, advanced equipment and adequate space and lighting.

the Boards of Roads and Revenues of our supporting counties," Mr. Wilson concludes, "this Hospital Authority may anticipate improvements in its programs of patient care, research, and teaching."

This same optimism was expressed by Dean Arthur Richardson of Emory University School of Medicine. "We have every right to be proud of our past," Dr. Richardson stated. "The future looks bright indeed, and the new Grady Hospital will play an increasingly important role in this development. Emory looks forward to many years of pleasant, productive association with Grady Memorial Hospital."

The Dean continued, further explaining the association of Grady and Emory.

"For over forty years, Grady Memorial Hospital and Emory University School of Medicine have been associated as partners in seeking to maintain



Figure 11: A shot of one of the rows of new files in the main record room. There are two such rooms in the new building, providing adequate space for patients' records.

and improve the health of the citizens of the South-eastern section of the country. The hospital itself has a legal responsibility to care for the indigent sick of Fulton and DeKalb counties. It has looked to the medical school for leadership in directing the professional aspects of this program. The direct effect has been a level of medical care for the indigent sick which would not otherwise have been possible. Emory is glad to accept this responsibility to the limit of available resources, because in so doing it is enabled to more effectively accomplish its additional objectives of teaching and research, which benefit not only the citizens of our local community but the entire Southeast by training a large number of the physicians who now carry out the private practice of medicine. Emory graduates everywhere have traditionally looked on Grady Hospital as a second home during their student days and are grateful for



Figure 12: Patients' rooms show marked improvement over those in the old building. The finest beds available are provided. Oxygen is pumped in by each bed. Bibles are placed in the rooms for patient use.

the opportunity they have had to learn and serve at the same time.

"The association of Emory and Grady is a natural one from which each benefits. Separately, it would be possible for us to be a 'good hospital' and a 'good medical school.' Together, we become 'great.' For this reason, Emory takes real pride in the opening of the new hospital. It is without a doubt the finest hospital of its kind in the country, and it insures Emory students of access to a wealth of clinical material which is unsurpassed.

"As has been true with all medical school-public hospital partnerships, it has been necessary over the years to examine the working agreements between the two parties from time to time. True, there have been disagreements, but the fact that the partnership has survived for so many decades is evidence that most differences are eventually resolved. The



Figure 13: A view of one of the hallways showing rows of consultation and examining rooms. The new hospital contains adequate space for medical staff offices.

contract and supplemental agreements between the school and hospital, which over the years have formalized our relationship, are excellent statements of our desire to work together for the common good. The most recent agreements clearly outline our respective areas of authority and responsibility, and should serve as a model for other schools and hospitals throughout the country.

"Marble, bricks, and mortar in themselves do not care for sick patients. Medical care is of necessity a personal problem requiring the services of a great many well trained professional people. It is Emory's role to take the leadership in the professional part of Grady's program. Emory does this through its full time volunteer faculty. Just as there has been improvement of physical facilities, likewise, there has been growth and development of the faculty and staff. In 1941, there was one full time member of the clinical faculty. Today, there is the equivalent of twenty-five full time salaried personnel located at Grady. No story of Emory University School of



Figure 140: An interesting shot of one of the nurseries in the new building. Here, newborn babies are fed by two Grady nurses.



Figure 15: This new X-Omat Processor in the radiology section develops and dries film in six minutes. It is one example of the many new and advanced pieces of equipment which are helping to establish Grady as one of the finest hospitals in the country.

Medicine and Grady Hospital would be complete without paying tribute to volunteers who give so devotedly of their time and talents to the school

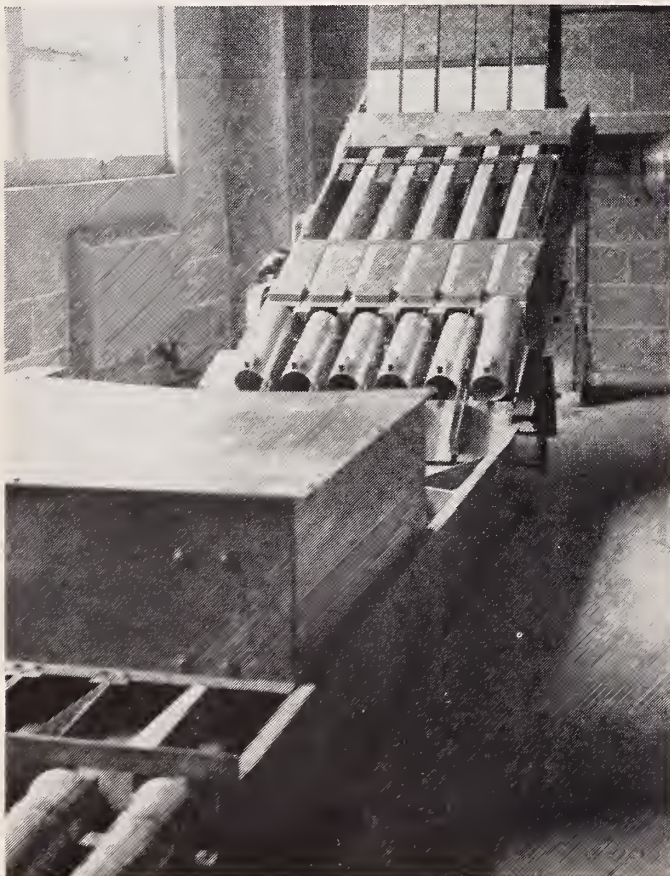


Figure 16: The pneumatic tube system pictured here has proved one of the greatest assets of the new hospital. This equipment facilitates the transmission of articles from floor without use of personnel.

and hospital. There are at present four hundred and fifty local physicians who actively participate in teaching and patient care. They constitute approximately one-half of the total doctors of this community. Without them, neither the school nor hospital could accomplish their objectives.

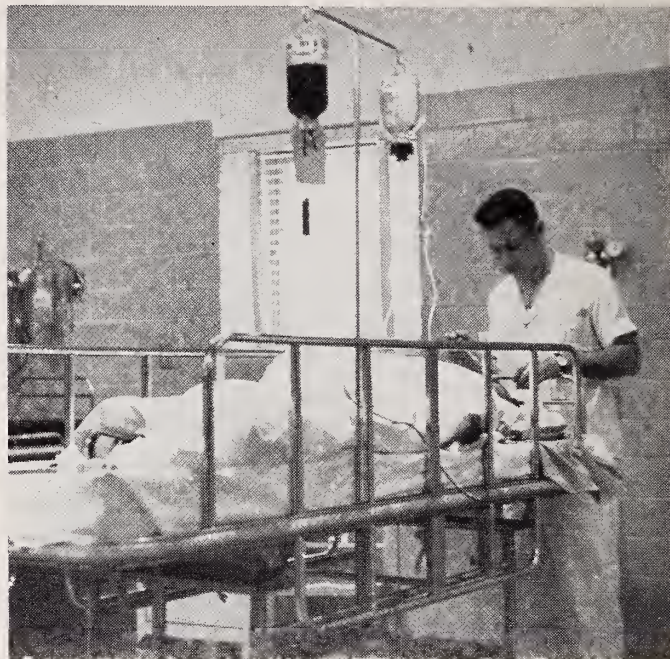


Figure 17: A scene in one of the recovery rooms showing new equipment. Here, a doctor gives a patient suction following a tonsillectomy.

"Vigorous research is an essential part of all high grade educational and patient care programs. It is through such activity that the practice of medicine of the future is forged. Development of research programs at Grady Hospital have kept pace with the



Figure 18: This shot of one of the hallways gives a vivid impression of the size of the hospital. Information desks like the one on the right are scattered throughout the hospital.



Figure 19: Mr. Frank Wilson, Superintendent of Grady Hospital, at his desk in the new building.



Figure 20: The new auditorium provides space for meetings, graduation ceremonies and postgraduate courses.

improvements in facilities and strengthening of staff. The school now administers approximately \$500,000 annually in research funds at Grady Hospital. The school and hospital both have a right to be proud of these various programs. They have made significant contributions to new medical knowledge, and at the same time, have benefited the educational and patient care programs."

At the conclusion of Dean Richardson's state-

ment, I felt much more familiar with the purpose of Grady and with the work that is being done. There was still a great deal to be seen and discussed. It would take many such trips to explore all the facets of the hospital. However, one thing was established. Grady Memorial Hospital stands as a tribute to the people of Atlanta and to the South. It is a great institution now. With the support it deserves, its development is unlimited.

A Four-Step Program for Reducing Perinatal Mortality in the Nursery

MADELENE M. DONNELLY, M.D., *Des Moines, Iowa*

MATERNAL DEATHS have decreased appreciably in the last few years. This decrease can be attributed to a number of factors, including early and more adequate prenatal care, increase of hospital deliveries, increased use and availability of whole blood, introduction of antibiotics, and the improvement of medical techniques and abilities.

There has also been a decrease in infant death rates, but this decline has not been apparent in deaths occurring on the natal day or in the neonatal period. Causes and prevention of fetal deaths have been ignored almost completely. Perinatal deaths must be reviewed with the intensity used on maternal deaths if perinatal loss is to be decreased.

The first step in prevention of perinatal deaths is providing adequate consultation to the nursery staff. A committee or a single member of the medical staff should be responsible for reviewing and approving routine procedures in the newborn nursery. Such a committee can do much toward conserving nursing time by formulating uniform procedures and periodically reappraising standing orders. Individual doctors should cooperate with the committee for the improvement of nursery procedures. For example, it should not be necessary to provide as many different formulas as there are doctors on the staff. One house formula should meet the needs of any normal newborn.

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Another important part of the nursery committee's work is making a detailed study of every perinatal death, in an attempt to determine the cause and preventability of each. Such studies create interest and often further medical knowledge.

The second step in the prevention of perinatal deaths is examining the facilities of the nursery. Briefly, the newborn nursery must be so constructed that it is isolated from the general hospital. Floor space between bassinets should be enough to eliminate the possibility of cross infection and to allow ease of work. In hospitals with a large case load the nursery should be divided into units so that no more than 12 infants are in one nursery. Good heating and ventilation, as well as controlled humidity, are basic necessities. Examining rooms, observation rooms, and special premature rooms, although separate from the nursery, should be readily accessible. Such a physical arrangement provides for the exclusion of all nonnursery personnel, including the medical staff. The attending physician should see the infant in the examination room only after observing scrubbing techniques practiced by regular nursery personnel. Only in emergency should he enter the nursery.

Equipment should consist of individual care bassinets and a few incubators. Depending on the incidence of small premature infants, one or two hand-hole type incubators may be necessary for caring for the very small or extremely ill infants. Oxygen must be readily available, but more important today is the need of an analy-

PERINATAL MORTALITY / Donnelly

zer to check the exact concentration of oxygen.

The third step of the program is an examination of the nursing staff itself. Personnel in this section need close health supervision, specialized training, and an abiding interest in the welfare of infants. Too often misfits whose nursing ability is so poor that adult patients will not tolerate them are assigned to the nursery.

Nursery personnel must have a dressing room in which to remove outer clothing and street shoes. After changing into hospital shoes, work dress and cap, the nurse must wash thoroughly and don a sterile gown before going into the nursery. Once she is in the nursery, hands are washed between service to each infant. Whether a mask must be worn depends on local regulations. Unless worn properly it is of no value and may be used to hide an upper respiratory infection.

The fourth step of the program of prevention of perinatal deaths refers directly to the newborn infant. There are few fundamental needs of the newborn infant: warmth, food, close observation to detect any sign or symptom of a pathological condition, and tender loving care.

Close observation in the first few hours of life will lead to early detection of many conditions which may be overcome if treated early. This re-emphasizes the need for close supervision by a completely trained nurse.

The only protection an infant has against infection is his own intact skin. A "hands off" policy will protect the infant's skin, whereas vigorous and frequent bathing will add to chances of infection. Actually, a newborn needs only enough cleaning to make him presentable to his parents. Ten to fourteen days must elapse before his skin assumes its normal texture. No amount of medication or oil will hasten this development.

The most contaminated articles in the nursery are the soiled diapers. These must be removed with as little handling as possible by the nursery attendant and dropped into a covered container, then removed frequently to another area of the hospital where they are rinsed and laundered by nonnursery personnel.

If a baby cannot be breast fed, it is important that his formula be sterile. Terminal sterilization, the preferred technique to assure a safe formula, saves a great deal of nursing time once the nurse has become familiar with it. If terminal sterilization is done, it must be done properly

to be effective. For example, if bottle and formula are processed separately from the nipples and the nipples are applied to the bottles at feeding time, this break in technique defeats the entire procedure even though it prolongs the life of the nipples.

The method of housekeeping in the nursery has a great effect on protection against infection. Janitors who come into the nursery should be closely supervised and carefully trained in acceptable practices. No dry dusting or mopping should ever be permitted. Scrubbing with soap and water is still the best way to keep the nursery clean.

Many of the errors made in handling a newborn stem from the failure of personnel to adjust to the shortened stay of the infant in the hospital. Nurses expect development and formation of behavior patterns that were seen when the stay in the hospital was 12 to 14 days. For example, the infant's skin formerly had reached its normal texture by the time he went home; now, with early dismissal, the skin is dry-looking and peeling, leading some mothers to think something is wrong. The nurse should explain that the condition is normal. Today an infant's feeding is apt to be hurried. No infant should be fed the first 24 hours, some not for 48 hours. There is a tendency to rush feeding, particularly if the mother wants to breast feed her baby. Breast feeding is still more satisfactory than formulas, but is often discouraged by nurses and doctors who do not want to take time to encourage mother and infant. At the other extreme, with short post partum hospitalization, nurses rush against time and try to establish breast feeding before nature intended it to start.

Hospital staffs often are unaware of possible sources of contamination in the nursery because they do not see active cases of impetigo or diarrhea. Many infants still have infections but the incubation period of the diseases are long enough and hospital stay of the infant short enough to permit dismissal before the onset of symptoms.

The hospital staff can no longer dismiss obstetric patient from care when she is released from the hospital. Service given in the hospital must be extended to integrate with post-hospital follow-up. When visiting nurses or public health nurses are available, the hospital administrator and staff should work closely with them to extend prenatal and post partum education to the entire community as well as to patients.

NEWLY LICENSED PHYSICIANS IN GEORGIA

Herbert Harvey Davis
Sewickley Valley Hosp., Sewickley, Pa.

Charles McClelland Gill
2840 Sanford Rd., Decatur, Ga.

Jesse Clarence Lester
Georgia Baptist Hosp., Box 370, Atlanta 12, Ga.

Hui-Ching Yen Lin
Battley State Hosp., Rome, Ga.

David Kimbrough McAfee
3134 McCurdy Way, Decatur, Ga.

Ernest Gary McKay
John D. Archbold Mem. Hosp., Thomasville, Ga.

Calvin Wallace Martin
The Medical Center, Columbus, Ga.

Everett Cole Mosley
455 B Craig Dr., Fort Benning, Ga.

Robert Earl Stone
37 Engineer Dr., Columbus, Ga.

THE GRADY MEMORIAL HOSPITAL, 1958

THE OPENING OF THE new Grady Hospital in January of this year marked the beginning of a new era for indigent patient care in the Atlanta area. At the same time it made available to the Emory University School of Medicine unparalleled facilities for clinical teaching and research. In March of this year a new agreement between the Hospital Authority and the Medical School was signed by both parties. Officials of both the Medical School and the Hospital Authority are highly pleased with the working agreement and feel that it will pave the way for continuous harmonious cooperation. If the new agreement works out as well as anticipated, it could conceivably provide a blueprint for mutual cooperation between other medical schools and hospitals for the indigent over the country.

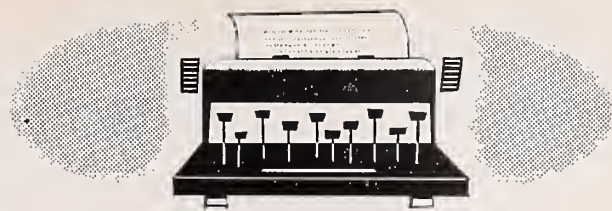
Those members of the Fulton-DeKalb Hospital Authority are to be congratulated for their wisdom and foresight in the planning and construction of this modern facility for community health. The new Grady Hospital will remain as a monument to the leadership of these men.

The new Grady Hospital is indeed an imposing structure. It stands not only as an imposing addition to the skyline of Atlanta but as a constant challenge to those on whom its future rests. A headstart has been made for a great future.

MENTAL HEALTH LEGISLATION

THE RECENT LEGISLATIVE session of the Georgia General Assembly enacted measures designed to improve treatment of the mentally ill and promote the development of a strong mental health program in Georgia. This legislation came as the result of a careful study of present mental health needs and resources by the Mental Health Study Committee of the Legislature under the chairmanship of Senator Peyton Hawes. This constitutes the first major legislation designed to create and promote a broad mental health program for our state.

Physicians representing the Medical Association of Georgia and the Georgia Psychiatric Association met with members of the Georgia Association for Mental Health in formulating a series of recommendations to the Legislative Study Committee. The legislative committee proposed legislation which was in keeping with medical recommendations and those measures enacted represent a major legislative effort to carry out the recommendations of both medical organizations.



editorials

The three basic provisions in this new legislation are: (1) The establishment of a strong Division of Mental Health in the State Department of Public Health; (2) The revision of commitment procedures; and (3) The provision of scholarships for physicians training to be psychiatrists and for other professional mental health personnel.

The bill providing for the establishment of the Division of Mental Health in the Health Department gives legal status to the Mental Health Program which has been in operation in the Health Department for several years. This division provides that a qualified physician be designated as director with full power to develop and expand the present program, to promote the development of intensive diagnostic and treatment centers along with outpatient clinics and general hospitals, and to develop a research program.

The bill providing for revision of commitment procedures provides for commitment by the Ordinary's Court upon the certification of a licensed physician and the report of two designated examiners specially qualified in the diagnosis of mental or related illness. This commitment may be to any public or private hospital approved by the Department of Public Welfare for mentally ill persons. This act does not take away from the sick person his civil rights except as necessary for the treatment of his illness. This act prohibits the detention of a mentally ill person in jail except "because of and during an extreme emergency." This act does not become effective until July 1, 1958, and even at that time it is possible for a person to be committed under the old laws relating to the commitment of insane persons if the patient or his counsel requests that these laws be used. This revised procedure is a definite step forward in efforts of the medical profession to obtain modern laws based on medical knowledge for the care and treatment of persons suffering with mental illness. It also provides legal

EDITORIALS / Continued

basis for commitment to public or private hospitals other than Milledgeville State Hospital.

The provision of scholarships for psychiatrists and other professional mental health personnel is similar to legislation providing for scholarships for medical students and requires an agreement to practice one year in Georgia for each year the scholarship is used.

The combined efforts of our Association with the Georgia Psychiatric Association and the Georgia Association for Mental Health in promoting health legislation for the citizens of our state exemplifies the spirit of team work and cooperation between the Medical Association of Georgia and those citizens' organizations interested in the health of our state.

THE BURN WOUND

ANNUALLY AT THIS time one sees the ill effect of prolonged treatment of burn wounds. Despite visual experience during their education and the many efforts of authors to impress upon the practicing physician the need for early debridement and grafting, delay is frequent in returning these patients to normal daily living activities.

The greatest area of neglect occurs in a patient

with one to 20 per cent involvement of surface area by third degree burn. This is the individual who, unfortunately, most often is managed for weeks to months with dressing changes, salves, innumerable doses of antibiotics, soaks, etc.

Pain, morbidity, economic loss, and unnecessary scarring can be avoided by relatively early debridement and subsequent skin grafting. This method of treatment results in complete healing and total rehabilitation in less than 28 days from injury, as compared to a situation which can be prolonged into months.

One must be cognizant of several well documented facts:

1. Third degree burned areas must be resurfaced with skin grafts if over two cms. wide.
2. Necrotic, cadaveric, or infected skin (obviously having lost its vitality) must be removed.
3. Grafting is only successful on clean, fresh granulating areas not left exposed to potential infection.
4. Surgical debridement is faster and just as important to the burn wound as it is in any area where tissue necrosis results from trauma.
5. Early treatment and restoration of surface continuity avoids a potential staph. septicemia. Hemolytic staphylococcus aureus, coagulase positive, organisms are the most frequent invader of the recently burned area.

MEDICAL EDUCATION HIGHLIGHTED

THE KEY ROLE played by medical education and medical schools in promoting and maintaining national health and security is being highlighted during the third annual Medical Education Week, April 20-26.

The general objective of the week, according to an editorial in the current (April 19) Journal of the American Medical Association, is "to develop public understanding of the progress, aims, and problems of medical education."

Local clubs, organizations, and county medical societies scheduled programs to acquaint the public with the great advances in medical education that have occurred in the last decade—advances that have added years of healthful life to many Americans.

The public will have the opportunity of visiting teaching hospitals, research laboratories, and medical school classrooms—the places from which many of the medical advances have sprung.

The work is endorsed by President Eisenhower, who said, "Our people are well aware of the role of modern medicine in the national health structure and I know they will support, by private or public means, the continued growth of medical education in this country."

The nation now has 82 medical schools graduating physicians each year, and within the next five years the number will be raised to 88.

During the 1957-58 school year, U. S. medical school are:

- (1) Teaching 30,000 undergraduate medical students, of whom approximately 7,000 will be graduated this year.
- (2) Instructing nearly 63,000 other students—graduate doctors, interns, residents, research scientists, and dental, pharmacy, and nursing students.
- (3) Serving approximately 37,000 practicing physicians through short courses, seminars, and clinical conferences at the schools and in local communities.
- (4) Providing nearly two and a half million persons with free medical care through associated teaching hospitals and clinics.
- (5) Conducting research projects costing more than 60 million dollars.
- (6) Furnishing, through their faculty members, leadership and guidance for thousands of health agencies, organizations and foundations, both here and abroad.

CONSTRUCTIVE PERICARDITIS

PURCELL ROBERTS, M.D., *Atlanta, Ga.*



THE SOMEWHAT infrequent but challenging entity of constrictive pericarditis was described in Europe in 1923. Even though reporting of the first successful American operation was about 25 years ago, surgical indications and technique have only lately been defined. Recent catheter studies have proved the primary disability to be restriction of diastolic filling, which imposes a fixed stroke volume and low output. This crippling of the heart removes its natural adaptive capacity for varying bodily activity.

The clinical aspects of constrictive pericarditis are well known: congestive failure not responding to the usual measures, or only poorly; low pulse pressure; and a heart shadow, even if moderately enlarged, which is usually smaller than one would expect from the degree of congestion of the circulation. The high ventricular filling pressure can be noted in the veins of the neck and lungs. Calcification of the pericardium is seen in only half of the patients.

A patient so impaired, for example, may complain chiefly of weakness and exertional dyspnea for the past few months and may notice soreness in the epigastrium (hepatic distention). There is usually no anginal distress but a feeling of tightness in the chest. BP may range about 120/100-90 and pulse around 100 or more and there may be slight irregularity (PVC's). Liver is noted to extend several finger-breaths below the costal margin and the neck veins are distended. EKG shows a defective, non-specific pattern, with low voltage and/or inversions of lateral precordial T-waves. At fluoroscopy the heart border is practically immobile and pulsations of the hilar vessels are not seen. On pericardotomy the venous pressure may be found as high as 270 mms. of water, and after surgery may be down to 100 mms. PPD may be negative or anergic in spite of underlying tuberculous infection. Following surg-

ery the heart-sounds are of better quality, pulse fuller, liver reduced in size, edema is controlled, even with salt usage.

The most frequent antecedent disease is tuberculous pericarditis, rarely rheumatic carditis. For this reason, preventive therapy (antituberculous drugs) in acute specific pericarditis is obligatory. The second most common causative organism is the pneumococcus. It is quite important to differentiate this condition from rheumatic heart disease with pericardial adhesions (chronic adhesive mediastinopericarditis) since, in the latter, endocardial and valvular damage accounts largely for the patient's debility. Diffuse myocardial fibrosis and endocardial fibrosis cannot be distinguished by catheter studies and may require surgical differentiation. There may be complicating cicatricial disease of the pleura. The hepatic congestion may lead to cardiac cirrhosis. Atrial fibrillation may be present. There may be associated chronic broncho-pulmonary disease.

The major objective is decortication of the two ventricles. Stripping the atrial and great-vein scars is now considered of less importance. Without operation these patients show little tendency to improve and will deteriorate over the years. Surgical results are variable but many patients return to normal or nearly normal activity in impressive fashion. Very few show a return to completely normal hemodynamics. Permanence of health is dependent on the success of surgery as well as any continuing infection, also on the extent of associated cardiac, pulmonary or other disease. Hypertension in an operated patient is an unfavorable factor.

In summary, this disability offers signal opportunity for corrective surgery, which is indicated if simulating and complicating conditions can be ruled out. In spite of its rarity, constrictive pericarditis should be kept in mind in the differential diagnosis of congestive failure and cardiac insufficiency.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

metaphosphate produced markedly higher blood levels than capsules containing either the corresponding base or the hydrochloride alone. In addition, the average levels derived from the tetracycline base or the chlortetracycline base were higher than those produced by the corresponding hydrochloride though lower than those resulting from the mixture containing the base and sodium metaphosphate. In the study with chlortetracycline⁶ capsules containing a mixture of the hydrochloride and sodium metaphosphate were also included in the crossover, and the average levels produced by these capsules were the same as with the mixture of chlortetracycline base with sodium metaphosphate.

Although the enhancement of blood levels of tetracycline by phosphate, either complexed to the tetracycline or mixed with the base or the hydrochloride, thus seemed fairly well established, some doubts still remained because certain reliable observers (including many whose results have not been published) failed to confirm the findings with the materials and methods they used. Further confusion seemed to be added by a subsequent report of Welch et al.,⁷ who, in repeating a crossover study with capsules of tetracycline phosphate complex and tetracycline hydrochloride with and without sodium metaphosphate, found that the

cycline base. Dicalcium phosphate and food resulted in lower, and sodium metaphosphate in higher, serum antibacterial activity than was observed in their absence. Oil and sorbitol did not interfere with tetracycline absorption.

Dicalcium phosphate is widely used as a filler in various capsules, including those of the tetracyclines. The authors cite a large number of other studies that implicate the presence of calcium ions as the cause of the reduced absorption of tetracyclines and show that citric acid can partially neutralize this effect. The depressing effect of food on the serum levels of tetracycline is likewise explained by the goodly amount of minerals contained in commercial laboratory diets, and they postulate that the multivalent cations may be responsible for the poorer absorption of the drug. The authors could not explain the failure of citric acid to enhance serum concentrations when administered with tetracycline base in contrast to its marked effect when given as the hydrochloride. However, they hypothesized that the ability of citric acid to enhance serum levels of tetracycline is not due to its ability to form complexes but to its ability to form complexes with calcium ions, thus making them unavailable for absorption.

“...Tetracycline hydrochloride and citric acid, in an encapsulated mixture, produced higher serum concentrations and greater urinary excretions, and hence better absorption of tetracyclines, than any other preparation studied...”

of sodium metaphosphate were published simultaneously with the last mentioned report of Welch et al.⁷ These data were based on thoroughly controlled studies both in rats⁸ and in man⁹ and include additional findings that serve to explain, fairly conclusively, the various discrepancies that have been mentioned.

The experiments in rats⁸ were carried out to study the effects of citric acid, dicalcium phosphate, sodium metaphosphate, food, oil and sorbitol on the serum antibacterial activity produced by the administration of tetracycline hydrochloride or tetracycline base. Citric acid administered in equal weight with tetracycline hydrochloride gave the highest concentrations of all the preparations studied. No enhancing effect was obtained from citric acid when given with tetra-

addendum to the last mentioned paper of Welch et al.⁷ indicates that in their study the capsules of tetracycline hydrochloride, chlortetracycline hydrochloride and tetracycline phosphate complex all contained dicalcium phosphate as a filler, whereas the capsules containing citric acid and sodium hexametaphosphate did not contain any dicalcium phosphate. This could clearly explain the discrepancies noted in that study. Likewise, the inconsistencies in other studies may very well have been due to the presence of calcium as fillers in some of the capsules and not in others.

This, however, fails to explain the most recent findings of Welch and Wright,¹⁰ who compared the absorption of three capsules, each containing 250 mg. of oxytetracycline hydrochloride — one without any adjuvant, one with 250 mg. of citric acid and the third with 380 mg. of sodium hexametaphosphate; no other filler was contained in any of these capsules. In triple

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Editorial.
The New England Journal of Medicine.
258:97-99, (January 9) 1958

ACHROMYCIN*V

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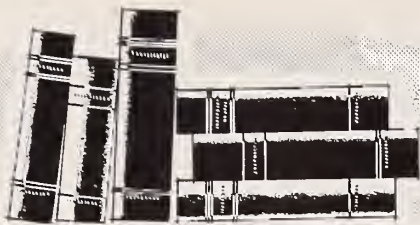
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LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK
*Reg. U. S. Pat. Off.



physician's bookshelf

BOOKS RECEIVED

Florey, Sir Howard, M.D., (Editor), **GENERAL PATHOLOGY**, W. B. Saunders and Company, 1958, 918 pp.

Glaister, John, M.D., **MEDICAL JURISPRUDENCE AND TOXICOLOGY**, The Williams and Wilkins Company, 1957, 692 pp., \$10.00.

Conn, Howard F., M.D., **CURRENT THERAPY**, W. B. Saunders Company, Philadelphia 1958, 733 pp.

Welch, C. Stuart, M.D.; and Samuel R. Powers, Jr., **THE ESSENCE OF SURGERY**, W. B. Saunders Company, Philadelphia 1958, 320 pp., \$7.00.

REVIEWS

Simon S. Leopold, M.D., **THE PRINCIPLES AND METHODS OF PHYSICAL DIAGNOSIS**, W. B. Saunders Company, Philadelphia, 1957, 2nd ed., 379 illustrations, 25 color plates, 537 pages. Retail price \$8.50.

TEXTBOOKS IN THIS discipline usually have one of two purposes: (1) A reference tome for any physician, or (2) A companion piece for sophomore medical instruction. This work falls into the latter category and should be entirely satisfactory. The present edition is phenomenally improved over its predecessor in ways too numerous to mention except possibly the addition of a good, modern bibliography. The illustrations are exceptionally appropriate, particularly several colored photographs. The middle aged reader who has a sense of "deja vu" will gradually realize that many, including unique pathological frozen sections, are reprinted from that late lamented classic of yesteryear (Norris and Landis) over which he probably toiled so diligently. The chapter on muscle testing is outstandingly diagrammed. These maneuvers are often as difficult to comprehend from the written word as Gray's description of the internal auditory canal. The necessarily inadequate explanation of psychodynamic mechanisms should probably have been left to the introductory course in psychiatry and this space used for interview techniques and interpretations. There is an excellent discussion of the elementary physics of sound transmission and recording, but strangely, it is insecurely wedded to the succeeding descriptive chapters. Students (and doctors) are equally as deficient

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

in the superficially simple hydraulics governing cardiovascular sound production, and unfortunately this is omitted. The result is an unnecessarily haphazard detailing of heart murmurs. The author correlates signs, symptoms, and pathology well. The inclusion of a chapter on the pediatric examination is a rather important innovation. The indexing, printing, and format are a credit to the publishers.

A. Calhoun Witham, M.D.

Dickinson, C. J., **CLINICAL PATHOLOGY DATA** (Second Edition), Charles C. Thomas, Springfield, Illinois, October 1957, 81 pp., \$4.00.

IN SOME RESPECTS this is an unusual book, somewhat different in arrangement and in approach to very interesting topics dealing with clinical pathology. It comprises only 81 pages, and has been clearly and delightfully printed in fine style in Great Britain, and published by Charles C. Thomas.

The book is composed of brief outlines of important tests and their interpretations which are clearly defined for practicality, covering blood plasma, and various blood components of blood chemistry, cerebro spinal fluid, feces, gastric analysis, glucose tolerance, kidney function, liver function, serological and blood grouping or specific reactions, etc. Much ground is covered without using superfluous description, which adds to the books attractiveness. The authors are extraordinarily prepared and recognized in their respective fields of practice, and the facts can be accepted as authoritative. This book can be recommended wholeheartedly to those who want dependable information in short dosage and who desire to keep abreast of what's going on in clinical pathology. The book essentially emphasizes interpretation and not technique, and would be of immense help in the management of many serious conditions and situations.

Jack C. Norris, M.D.

Sugg, Redding, Jr., (Editor), **NUCLEAR ENERGY IN THE SOUTH**, Louisiana State University Press, Baton Rouge, La., November 1957, 138 pp., \$3.50.

THIS IS A BOOK of 151 pages and is concerned with the development of nuclear energy in the 16 southern states.

Great emphasis is placed on the importance of southern states having a strong program directed toward the development and utilization of nuclear energy in the many different fields to which it is applicable. This concerted effort is an outgrowth of the Southern Governors Conference which requested the Southern Regional Education Board to organize a regionwide conference. This book is essentially a summary of the material presented at the regional work Conference on Nuclear Energy held at St. Petersburg, Florida, in August, 1956.

The first chapter deals with nuclear energy in the production of electric power in the South. Chapter two discusses the opportunities for Nuclear Industry and notes that present facilities in the South for nuclear industrial development are highly inadequate.

The use of nuclear energy in studying and solving certain agricultural problems is discussed in chapter three.

A brief survey of the applications of ionizing radiations in medicine and certain public health problem are presented in chapter four.

A discussion of the education of scientists and teachers as the key to nuclear development is the subject of chapter five. Appendices give a roster of participants and Regional Advisory Council.

This book should be of interest to physicians both as doctors of medicine and as citizens, because it succinctly presents the present problems and potentialities in the development of nuclear energy in our area and makes certain recommendations in solving some of the problems.

John T. Godwin, M.D.

Beckman, Harry, M.D., DRUGS, THEIR NATURE, ACTION AND USE, FIRST EDITION, W. B. Saunders Company, Philadelphia and London, 1958, 728 pages, 126 figures, \$15.00.

Dr. Beckman states in his preface: "This is a textbook for the undergraduate medical student, who can devote but a fleeting moment in his career to prepare for the pharmacologic aspects of the practice that lies ahead." Intended only for medical students, the book is clinically oriented. A description of the clinical effects of the drugs occurs early in each chapter, being preceded only by a short section on the source, nature, and preparations of the drug under discussion. The presentation of the nature of the pharmacologic action, the absorption, distribution and metabolism of the drugs, dosage, side-actions, toxicity, and contraindications follows. Some of the outstanding features of this book are: The excellent and informative Table of Contents; Chapter One-entitled "A Justification of Pharmacology and Pharmacologists"; The up-to-the-minute information; The interesting and entertaining style of writing.

This book can be highly recommended as a textbook for students of medicine regardless of status and progress in their profession. It should stimulate the undergraduate to find out how and why to practice rational therapeutics in the future. For the resident or practitioner it should review the old, and introduce the new and most modern therapeutic agents.

R. P. Ahlquist, Ph.D.

Schamroth, L., AN INTRODUCTION TO ELECTROCARDIOGRAPHY, Charles C. Thomas, Springfield, Illinois, 1957, 58 pp., \$2.50.

This little book consisting of 58 pages of text, if considered only in the light in which it is written, is excellent.

Professor Schamroth, in his preface states that it is a stepping stone to a fuller and more detailed study of the subject.

In the reviewer's opinion there are better texts for students who intend to pursue the subject seriously. How-

ever so many people who order electrocardiograms are incapable of interpreting a report when it has been presented. A quick glance in this concise little text would explain the report very nicely. Every physician who is not an electrocardiographer, but who occasionally orders tracings, should keep a copy on his desk or nearby.

The general observations explained on page fifty-two deserves such emphasis in every book dealing with this subject. Some of the illustrations or sketches accompanying the section on Arrhythmia are probably unnecessary.

Simone Brocato, M.D.

Novak, Emil, M.D. and Novak, Edmund R., M.D., GYNECOLOGIC AND OBSTETRIC PATHOLOGY, Fourth Edition, W. B. Saunders Company, Philadelphia, 1958, 627 pages; \$14.00.

THIS BOOK is a veritable storehouse of information in the field of gynecologic and obstetric pathology written in the same accurate, concise, easy-to-read manner which has characterized the previous Novak editions. The junior author collaborated with his father in the writing of this text and after the latter's death carried the work through to publication. He has certainly succeeded in maintaining the unique position which the previous editions of this book have occupied in this field of medicine.

The authors have made various changes in the current edition to keep it up-to-date with recent cytological developments which are discussed at length in a chapter devoted to the relatively new subject of exfoliative cytopathology. Along with this discussion is an excellent section of special interest to the clinician on the techniques for the proper preparation of cervical and vaginal smears for study by the pathologist.

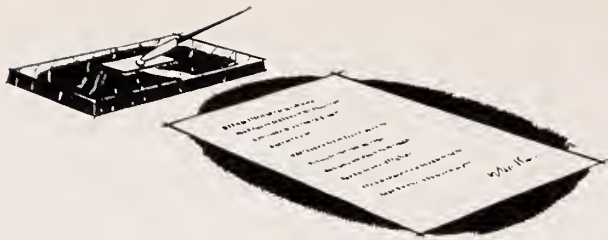
The chapters on placental abnormalities, implantation and placentation have been completely rewritten to include the present day concepts concerning the abnormalities and disease of the placenta.

The fourth edition, as was the case with the previous one, has excellent chapters on the ovarian and uterine neoplasms, and the authors have completely discussed such important and equivocal pathological problems as the relationships of basal cell hyperactivity and intraepithelial carcinoma, and endometrial hyperplasia and adenocarcinoma.

The chapter on hydatidiform mole and chorionepithelioma provides most interesting reading. The gross and microscopic pathology of these conditions is thoroughly covered along with the hormonal relationships and clinical aspects of the diseases.

The 863 illustrations, twenty-five of which are in color, have beautifully documented the text of the book and add immeasurably to its value. Every physician who works in the field of obstetrics and gynecology will find this volume to be a most helpful addition to his armamentarium, and it should be considered a must for every medical student.

William C. Helms, M.D.



abstracts by georgia authors

Harrison, J. Harold, Department of Surgery, Emory University School of Medicine, Atlanta, Georgia, "Influence of Infection on Homografts and Synthetic (Teflon) Grafts." Arch. Surg. 76:67-73 (Jan) 1958.

Frozen, dried homografts and woven purified "Teflon" tubes were inserted as vascular prostheses in infected and contaminated wounds in 41 dogs.

Fifty per cent of the animals with homografts died primarily as a result of exsanguination from rupture of the grafts. Complications with "Teflon" grafts were due primarily to peritonitis with or without occlusion of the grafts. Twenty-nine per cent of the animals died, only 19 per cent attributable directly to the grafts.

The proteolytic enzymes of infection cause deterioration of the walls of a homograft. If extensive, this leads to rupture in the early stages. Lesser degrees cause breakdown of the elastic fibers in the walls that might lead to aneurysm or rupture at later dates. Bleeding with the "Teflon" grafts is due only to separation at the suture lines from degeneration of the host artery and pulling out of the sutures.

Either will allow resolution of infection provided other complications do not ensue. Wound healing occurred with 45 per cent of the homografts and 43 per cent of the "Teflon" grafts.

Though both leave much to be desired, the results in this study indicate that "Teflon" grafts are superior to homografts.

The complications encountered are more amenable to therapy and less likely to cause death. Late complications of breakdown that might be expected with the homografts should not occur with "Teflon."

Early drainage and control of infection is imperative if good results are to be obtained with either.

Woodhall, J. P., 724 Hemlock Street, Macon, Georgia, "Traumatic Laceration of the Coronary Arteries," Arch. Surg. 76:133-137 (Jan) 1958.

Coronary artery laceration is a relatively rare complication of cardiac

trauma. Twenty-three such lacerations were found in a combined series of 576 cases of cardiac injury. Of the twenty-three cases, fourteen survived, twelve of these after surgical intervention and two after conservative therapy. Of the nine deaths, four were dead on admission, three died under conservative therapy, and two died following surgical intervention.

Of the five coronary artery lacerations treated without surgery, two survived, two died from rupture of a false aneurysm formed at the site of injury, and the fifth case treated by pericardial aspiration showed at autopsy the type of pathology which would be expected to precede aneurysm formation. It is suggested that false aneurysm formation is a distinct hazard of non-operative therapy when a coronary laceration is present. Two personal cases which illustrate the problems associated with coronary artery laceration are reported.

Harrison, J. Harold, Department of Surgery, Emory University School of Medicine, Atlanta, Georgia, "Synthetic Materials as Vascular Prostheses, No. II," Am. J. Surg. 95:3-24 (Jan) 1958.

Grafts of nylon, dacron, orlon, ivalon sponge and teflon were inserted into defects of the thoracic aorta of 84 dogs. Follow up studies include tensile strength determinations on the materials making up the grafts for periods up to two years.

Maintenance of patency of a synthetic graft is no problem when vessels larger than 9 mm. in diameter are replaced. Only one in this series became occluded and this secondary to a hematoma.

Nylon underwent rapid degeneration after implantation in the body. This was complete in one graft, resulting in a dissection aneurysm that ruptured through its fibrous enclosure and a bronchus. It is considered unsatisfactory as a vascular prosthesis. Ivalon sponge is also unsatisfactory due to rapid breakdown with aneurysm and rupture of the grafts.

Orlon, dacron, and teflon maintained their strength during the period of observation. Teflon is considered the material of choice as it is chemically more inert and would be expected to lose less strength after longer periods of time. Further follow-up after submission of this paper for publication indicates that this is true. In addition there has been late unexplained bleeding with hematomas around the dacron and orlon grafts. The only satisfactory grafts after the longer periods of observation were made of teflon.

Harrison, J. Harold, Department of Surgery, Emory University School of Medicine, Atlanta, Georgia, "Synthetic Materials as Vascular Prostheses No. I," Am. J. Surg. 95:3-24 (Jan) 1958.

Grafts of nylon, dacron, orlon, ivalon sponge, and teflon, with a wide range of physical properties, were inserted into the abdominal aorta, carotid and femoral arteries of 133 dogs. Frozen, dried homografts were inserted into the abdominal aorta of ten dogs as controls.

When vessels smaller than nine mm. in diameter are replaced by a synthetic prostheses, the primary problem is maintenance of patency. The best and only satisfactory results in this series were obtained with woven purified teflon tubes. Only 6.3 per cent of these became occluded by thrombosis which compares favorably with a 10 per cent occlusion rate of homografts.

Nylon grafts were accompanied by a high rate of thrombosis, and the thickness of the fibrous enclosure eliminated much of the advantages of non-buckling in the crimped tubes.

Dacron is considered better than nylon, but the thickness of the fibrin lining and high rate of occlusion makes it unsatisfactory for replacing small vessels.

Molded grafts of ivalon sponge were unsatisfactory due to excessive thrombosis and breakdown with aneurysm and/or rupture.

Grafts with a longitudinal seam are inferior to prewoven or model tubes. The latter will have less wrinkles and can be inserted with smoother anastomotic lines.

Synthetic grafts must be inserted under slight tension, as loose insertion will allow buckling with a high rate of occlusion.

Solid tubes will not remain patent in small vessels, and grafts with an air porosity of over 50 are too porous. Between these extremes the rate of healing is dependent as much on the reaction incited by the material as on the porosity of the graft.

None of the synthetic prostheses studied are satisfactory for replacing blood vessels less than five mm. in diameter.

Since the publication of this paper a knitted, purified and crimped teflon tube has been developed. Experimental and clinical evidence to date indicate that it will be superior to any of the others for replacing small blood vessels.

DO YOU KNOW?

THE COMMON COLD in most industries accounts for at least 50 per cent of all absences and nearly 25 per cent of all total time lost.

MAG COUNCIL MEETING

March 15, 1958

CHAIRMAN GEORGE R. DILLINGER called the meeting of Council of the Medical Association of Georgia to order at 2:30 p.m., March 15, 1958 in the Oak Room, Ralston Hotel, Columbus, Georgia.

Officers and Councilors present were: W. Bruce Schaefer, Toccoa, President; Lee Howard, Sr., Savannah, President-Elect; Hal M. Davison, Atlanta, Immediate Past President; T. A. Peterson, Savannah, 1st Vice President; Hugh Bickerstaff, Columbus, 2nd Vice President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and Thomas W. Goodwin, Augusta, Speaker of the House; Charles T. Brown, Guyton, 1st District; George R. Dillinger, Thomasville, 2nd District; W. G. Elliott, Cuthbert, 3rd District; J. W. Chambers, La-Grange, 4th District; J. G. McDaniel, Atlanta, 5th District; Henry H. Tift, Macon, 6th District; D. Lloyd Wood, Dalton, 7th District; F. G. Elridge, Valdosta, 8th District; C. R. Andrews, Canton, 9th District; and Addison Simpson, Jr., Washington, 10th District.

Vice-Councilors present included: Luther Wolff, Columbus, 3rd District; Virgil Williams, Griffin, 4th District; George H. Alexander, Forsyth, 6th District; Ralph W. Fowler, Marietta, 7th District; and David R. Thomas, Jr., Augusta, 10th District.

Also present were Clarence Butler, Columbus, Immediate Past President, Muscogee County Medical Society; John K. Davidson, Columbus; Mr. Tom Hendricks, Chicago, Illinois, AMA Field Director; Mr. M. D. Krueger, Executive Secretary; and Mr. John F. Kiser, Associate Executive Secretary.

The Council meeting minutes of December 7-8, 1957 were approved as corrected in that in the Medicare report appearing on page 3 there was reference to an AMA Medicare meeting of December 6, 1957 which was held in Philadelphia, Pennsylvania and not Chicago as stated in the minutes. The Executive Committee of Council meeting minutes of January 12, 1958 were approved as read.

Georgia Hospital-Medical Mediation Council

Mr. Krueger presented a proposal based on a recommendation of the MAG Hospital Relations Committee concerning the formation of a new group seeking to aid in physician-hospital administrator-trustee problems on a statewide basis. This proposal was read as follows:

Proposed
Georgia Hospital-Medical Mediation Council

Note: This is a form of liaison at state level, for specific purposes, as recommended by a drafting committee composed of representatives of the below listed organizations. It is for formal adoption as outlined, or with modifications, by the respective parent groups.

PURPOSES:

- 1. To provide a representative council available for local situations, upon request, for advice and consultation regarding local organizational problems;
- 2. To develop educational programs for improvement of medical-administrative-trustee relations at hospital level;
- 3. To develop proposed professional and administrative objectives for small hospitals;
- 4. To stimulate and assist small hospitals to attain acceptable standards; and
- 5. To study means of giving suitable recognition to small hospitals for attainment of improved standards.



the association

MEMBERSHIP:	Representatives on Council
Organization	
Georgia Hospital Association	2
Medical Association of Georgia	2
Ga. Assn. of Hospital Governing Boards	2
Ga. Chapter, American College of Surgeons	1
Georgia Academy of General Practice	1
Georgia Department of Public Health	1

MEETINGS: Quarterly, on first Sunday of March, June, September and December (beginning with the first Sunday in June, 1958) at 2:30 p.m. in offices of the Medical Assn. of Georgia, 875 W. Peachtree St., NE, Atlanta, Georgia; and additional call meetings at the discretion (including time and place) of the Chairman.

CHAIRMANSHIP: At its first regular quarterly meeting of each calendar year the Council will elect a Chairman from its membership. A Chairman may not succeed himself in office. Office and secretarial functions will be rotated annually between the Georgia Hospital Assn. and the Medical Assn. of Georgia beginning in 1958 with the Georgia Hospital Assn.

FINANCES: Office expense (communications, stationery, supplies, postage, etc.) will be borne jointly by the Medical Assn. of Georgia and the Georgia Hospital Assn., with initial appropriations of \$100 each for the year 1958.

Chairman Dillinger then called for discussion of this proposal and some objection to the number of medical specialties represented by this Mediation Committee was raised, and it was voted to disapprove the proposal. The motion carried. A motion was made to recommend change in the representation on this Mediation Committee. A substitute motion then took precedence as follows: It was voted that the Medical Association of Georgia recommend that this proposed Georgia Hospital-Medical Mediation Council choose a tenth member from one of the following: Radiology, Pathology or Anesthesiology, and further that if this recommendation is adopted by the Georgia Hospital-Medical Mediation Council, that the Council of the Medical Association of Georgia approve the original proposal, with this amendment.

Bankers Fidelity Life Insurance Company

President Schaefer presented a complaint about medical payments to physicians by the Bankers Fidelity Life Insurance Company in covering school children and the company's practices. This complaint was in the form of correspondence from Georgia physicians. Dr. Schaefer explained the company's function and clarified the indemnity-full service problem. General discussion of the correspondence ensued and the matter was referred to the Insurance and Economics Committee for recommendation to Council.

State Medical Education Board

President Schaefer gave background data on the organization and function of the State Medical Education Board and requested an opinion from the Council on the limitation of a single year's internship for these scholarship physicians. This request was discussed in the light of keeping the scholarship physician program on a general practitioner basis. It was voted that the Council of the Medical Association of Georgia recommend to the State Medical Education Board a minimum one year internship and a maximum of two years internship be instituted as a ruling of the State Medical Education Board in carrying out the provisions of the program.

President Schaefer then discussed the placement of these scholarship physicians under the program and emphasized that this, too, should concern the Medical Association of Georgia. Dr. Schaefer recommended that the cost up to \$100.00 for a luncheon for the applicants seeking scholarships from the State Medical Education Board be sponsored by the Association. It was voted to appropriate this amount, and further that this \$100.00 be charged to the Association Contingent Fund.

Medical Education and Licensure

Secretary Chris J. McLoughlin presented the following report on the 54th Annual Congress on Medical Education and Licensure held February 8-11, 1958, Chicago.

"The 54th Annual Congress on Medical Education and Licensure was held February 8-11th, at the Palmer House in Chicago, Illinois.

"In addition, there was a meeting of the American Association of Directors of Medical Education on February 8, 1958.

"Most of these meetings concerned trends in medical education, and there was a great deal of emphasis on the sociological aspects of the practice of medicine. One very impressive talk pointed out that at the rate the medical profession is "selling itself" to the American public, within a short while it will be necessary for two or three doctors to take care of each patient. This is manifestly an impossible situation. It may be one reason why people are becoming unhappy with their medical care. It was pointed out that soon people will simply expect and demand more than is physically possible for the medical profession to produce. Items such as this, of course, add to the cost of medical care too.

"Difficulties in the 'changing dimensions of medical knowledge and the obligations of medical education' were pointed out by Dr. Hugh Hussey, Professor of Medicine, Georgetown University School of Medicine. "Dr. Leila McKitterick, Chairman of the Council on Medical Education in hospitals, discussed the problems connected with training programs in various areas.

"In general, it was the feeling of almost all the speakers that to have an adequate postgraduate training program, the following elements must be inherent:

- 1) Graded and progressive increase in responsibility
- 2) Program continuity
- 3) Senior responsibility
- 4) Bedside basic sciences
- 5) Participation in research
- 6) A long view of the course of disease, and
- 7) Adequate supervision

Secretary McLoughlin then discussed the expenses

attending this meeting, and it was voted to remit to Dr. Stone the sum of \$123.74 for his expenses, and to charge this sum to the Association contingent fund.

1958 MAG Annual Session

Annual Session Chairman Henry Tift reported on the 1958 MAG Annual Session covering scientific, business, social, and commercial arrangements. The report was accepted for information, and Dr. Tift noted that the complete program for this meeting was published in the *JMAG* March 1958.

Finance Committee Report

Finance Committee Chairman J. G. McDaniel presented the 1957 audit of the Medical Association of Georgia as of and for the year ending December 31, 1957 as prepared by Ernst and Ernst, and it was voted that the Chairman of Council and the Chairman of the Council Finance Committee be commended for their activity in this connection during the year 1957 and that the audit be approved. It was further stated that the audit will be published in the Treasurer's report for submission to the 1958 House of Delegates meeting April 27-30, Macon, Georgia.

Dr. McDaniel then discussed the monthly budget report for 1958 and stated that the report shows the Association well within the 1958 budget for the first two months of 1958.

Dr. McDaniel then read the following letter from Ernst & Ernst concerning their recommendations to the Association in the conduct of MAG financial affairs:

"Dr. J. G. McDaniel
Chairman of the Finance Committee
The Medical Association of Georgia
875 West Peachtree Street, N.E.
Atlanta, Georgia

Dear Dr. McDaniel:

"During the recent meeting in which I discussed the Association's 1957 audit report with you and other members of the Finance Committee of the Medical Association of Georgia you will remember I raised the question concerning the purpose of the Benevolent and Building Funds and we discussed the Excess of Assets over Liabilities of the General Fund. At your suggestion I am summarizing in this letter my opinion regarding these two items:

"(1) For a number of years benevolences have been paid out of current income of the General Fund. If it is the intention of the Association to use the General Fund for benevolences it is desirable that the name of the Benevolent and Building Fund be changed to indicate that this fund is designated only for building purposes. If this is the purpose of the Benevolent and Building Fund I recommend that the Association by appropriate action state the purpose and manner of additions and deductions to this Fund.

"(2) The Excess of Assets over Liabilities of the General Fund represents an amount not subject to restrictions, any part of which, at the opinion of the Association, might be appropriated for specific purposes."

Very truly yours,
J. F. Drapalik
Staff Supervisor"

Dr. McDaniel stated that after discussing these recommendations with Mr. Drapalik of Ernst & Ernst, it is the feeling of the Finance Committee to recommend approval of these recommendations to the Association as follows: (1) As the Association benevolent payments to indigent MAG members have been for many years and are presently paid out of the general operating fund of the Association and not charged as to what is now known as the "Benevolent and Building

Fund", it is your Finance Committee's recommendation that the present "Benevolent and Building Fund" be properly called "Building Fund" to indicate that this fund is designated for building purposes; (2) that the annual excess of assets over liabilities of the general fund which at present represents an amount not subject to restriction, be restricted on the following basis—that any amount of assets over \$20,000 annually be designated to the Building Fund. It is believed that a \$20,000 balance is sufficient to carry on the business of the Association until the next year's dues are collected.

It was voted to change the name of the present Building and Benevolent Fund to Building Fund as recommended by the auditor.

It was further voted that the annual excess of assets over liabilities over the amount of \$20,000 be properly placed in the Building Fund.

Postage Meter Equipment

Secretary Chris J. McLoughlin presented a survey of more efficient metering equipment for mailing in the Headquarters Office, and he gave data on the various types of postage meters available with the amount of mail presently being mailed by the Headquarters Office. It was voted that the Association purchase the large Pitney-Bowes meter and table costing approximately \$996.88 subject to the approval of the Finance Committee.

AMA Medical Legal Meeting

Associate Executive Secretary Mr. John F. Kiser presented a recommendation by the Council Executive Committee that the MAG Attorney Mr. John Dunaway and one of the Executive Secretaries attend the Second National Legal Conference for State Associations sponsored by the AMA May 9-10, 1958, Chicago, Illinois. It was voted to send one of the Executive Secretaries to attend this conference, with his expenses to be charged to the Headquarters Office travel, and to send the Association Attorney, Mr. John Dunaway to this same conference, with his expenses to be charged to the Association Contingent Fund.

MAG Weekly Health Column

Associate Executive Secretary Mr. Kiser reported on the joint project of the Rural Health Committee and the Public Relations Committee in furnishing MAG Weekly health columns to weekly Georgia newspapers for publication in these newspapers. Mr. Kiser emphasized that material was being prepared by an Association Committee and that the Medical subjects discussed in these columns would be of benefit and interest to the citizens of Georgia in the health and care of their families. It was voted to commend the Rural Health Committee and the Public Service Committee on this project and to thoroughly endorse this means of furnishing the citizens of Georgia with information about health care.

Veterans Administration and Workmen's Compensation Fee Schedules

Secretary Chris J. McLoughlin reported on the progress of negotiation with the Veterans Administration on the Veterans Home Town Care Program schedule of fees and negotiation with the Georgia State Board of Workmen's Compensation on the compensation fee schedule. Reconsideration of these fee schedules

were discussed and the report was accepted for information.

MAG Legislative Committee

Mr. John F. Kiser reported for Legislative Committee Chairman, J. F. Walker on the 1958 session of the Georgia General Assembly as it affected the health of the citizens of Georgia in medical and health measures passed by the Assembly. It was voted to commend the Legislative Committee for their activity in this connection and to award the four doctor-senators Association Certificates of Appreciation for their civic service as both a physician and a citizen of the State of Georgia. These physicians are: Marcus Mashburn, Cumming; H. M. Edge, Blairsville; F. P. Holder, Eastman; and C. J. Roper, Jasper.

Forand Bill

Eustace Allen, MAG National Legislative Chairman, discussed the Forand Bill now before Congress and explained the AMA policy on this measure. Chairman Dillinger also called on Tom Hendricks, AMA Field Director, who gave the latest information and a review of the present status of the Forand Bill in Congress. It was voted that the Medical Association of Georgia is opposed to the Forand Bill and strongly endorses the AMA position against similar types of legislation.

Medicare Report

Secretary Chris J. McLoughlin reported on the renegotiation of the Medicare Contract, February 10, 1958, Washington, D. C. Dr. McLoughlin stated that MAG representatives at this negotiation first presented a Medicare indemnity-type plan to the Department of the Army and they informed him that they did not have the authority to negotiate this type of contract. The MAG then negotiated the present full service contract and certain changes in the contract were discussed, and it was noted that the Army is tightening the administrative control of the plan. Dr. McLoughlin gave a review of the Georgia program to date in the administration of the Medicare plan and stated that now the Review Board had been set up on a more representative basis, and enlarged to encompass the areas of the State in which the Medicare program was most active. F. G. Eldridge requested the appointment of a Glynn County Medical Society physician on the Review Board to represent the 8th District, and he recommended that the Executive Committee of Council request the Glynn County Medical Society to forward three names for the consideration of the Executive Committee for service on the Review Board. After general discussion, this matter was then referred to the Executive Committee for action.

MAG-Veterans of Foreign Wars Liaison

President Schaefer reported on initial discussions with the Veterans of Foreign Wars representatives concerning the problems of veterans medical care. Dr. Andrews, also a member of the MAG-VFW Liaison Committee discussed certain problems involved in VA Hospital problems and stated that this Liaison Committee would attempt to clarify areas of misunderstanding and seek areas of cooperation between the MAG and the VFW. President Schaefer recommended the continuance of this Committee for 1958-59, and this motion was approved.

Talmadge Hospital Problem

Secretary Chris J. McLoughlin reported that there

had been no evident activity as yet from the AMA Mediation Committee requested by the MAG, Richmond County Medical Society, and Medical College of Georgia in relation to the Talmadge Hospital problem.

Unfinished Business

Chairman Dillinger called for unfinished business and Dr. McDaniel requested commendation to Council for the Editor of the *Journal of the Medical Association of Georgia*, and it was voted to commend Edgar Woody, Jr., Editor of the *Journal of the Medical Association of Georgia*, for his splendid and untiring efforts.

New Business

Chairman Dillinger then called for items of new business as follows:

Alabama Fraternal Delegates

It was voted to request the Muscogee County Medical Society President to select a Muscogee County Medical Society member to attend the Alabama Medical Association annual session in behalf of the Medical Association of Georgia.

MAG Building

Secretary McLoughlin reviewed the present situation concerning the progress of the MAG Building Committee in their discussion with the Fulton County Medical Society. He stated that certain preliminary negotiations had been discussed with Fulton County Medical Society concerning land for the site of an MAG Headquarters Building. Harold P. McDonald, President of the Fulton County Medical Society, explained that the Board of Trustees had referred this matter to the FCMS Building and Planning Committee and that Fulton County Medical Society wished an expression from Council on the present discussion and negotiation. It was voted that the Council Building Committee and the MAG President, Chairman of Council and Chairman of Finance Committee, be authorized and empowered to negotiate an agreement with the Fulton County Medical Society on a Medical Association of Georgia Building and land subject to ratification by the Association House of Delegates.

Certificates of Appreciation

Mr. Krueger presented data on the annual awarding by the Association of Certificates of Appreciation and it was voted to award a Certificate of Appreciation to J. Lee Walker, Clarkesville, for his service as Chairman of the MAG Rural Health Committee, and Charles Mulherin, Augusta, for his service as Chairman of the Maternal and Infant Welfare Committee. It was referred to Executive Committee that an MAG Certificate of Appreciation be presented to George Lull, Secretary of the AMA.

Georgia PTA Congress

Secretary McLoughlin read correspondence from Thomas C. McPherson, Chairman of the Association Special Committee on School Child Health, in which Dr. McPherson requested permission to attend the Georgia Congress of Parents and Teachers in Savannah

to participate in a panel discussion on the continuance health program being sponsored for adoption in Georgia by the PTA. Dr. McPherson also requested reimbursement for his expenses in this capacity. It was recommended that Dr. McPherson attend this meeting in the Association's behalf. In the general discussion there was concern about the precedent of paying in-state travel for members of the Association, and it was recommended that Dr. McPherson defray his own expenses in attendance at this Savannah PTA meeting.

GP of the Year Award

Chairman of Council Dillinger read correspondence from W. M. Moncrief, Secretary-Treasurer of the Georgia Academy of General Practice, in which, by official action of the Board of Directors of the Georgia Academy of General Practice, the name of Dr. Fred H. Simonton, Chickamauga, was placed in nomination for the Association GP of the Year Award. It was noted that this nomination will be presented at the first meeting of the House of Delegates when nominations from the floor will also be requested and from these nominations the House of Delegates will elect the GP of the Year Award recipient.

April Council Meeting

By general agreement, it was approved the Council of the Medical Association of Georgia will convene Saturday night, April 26 at 8 p.m., Dempsey Hotel, Macon, Georgia, for the last meeting of their 1957-58 Council.

Georgia Plan

Insurance and Economics Committee Chairman David R. Thomas, Jr., gave data on the Georgia Plan insurance problem with the Insurance Commissioner Zack Cravey. He recommended that the Council, the Insurance & Economics Committee and a representative from each county medical society meet with Insurance Commissioner Zack Cravey in Atlanta to discuss this problem, and it was voted that the Council, the Insurance & Economics Committee, meet in Atlanta with Mr. Cravey to discuss this problem, and that each Councilor be responsible for bringing a member from the county societies in his district to attend this meeting. It was recommended that the President of the Association request this meeting, and that the week of April 6 be considered. It was also agreed that Mr. Dunaway, Association Attorney, should be in attendance.

Muscogee County Medical Society Hospitality

By acclamation and rising vote it was approved to thank president, officers, and members of the Muscogee County Medical Society for their gracious hospitality to the Council of the Medical Association of Georgia and that the Association Secretary be requested to transmit these sentiments to the appropriate officers of the society.

There being no further business the Council meeting was adjourned at 11:30 a.m.

EXECUTIVE COMMITTEE MEETING

March 16, 1958

EXECUTIVE COMMITTEE OF THE Medical Association of Georgia held its March meeting at 12 p.m., Sunday,

March 16 in the Hotel Ralston, Columbus, Georgia. The meeting was called to order by Chairman Dillinger. Also present were President-Elect Lee Howard, Sr., Savannah; Immediate Past President, Hal M. Davison, Atlanta; Chairman of Finance, J. G. McDaniel, Atlanta; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and Messrs. Krueger and Kiser of the Headquarters Office and Editor of the MAG Journal, Edgar Woody, Jr.

Indemnity Information on Medicare

The Executive Committee discussed a letter from Lester Rumble, Jr., Atlanta, in regard to informing physicians in the State on the need for an indemnity type program for Medicare. Dr. Rumble suggested an editorial in the *Journal*, and a mailing to all members and a talk at the annual session. The Executive Committee delayed action on this matter for the time being until more effective means can be worked out for informing the members. Dr. McLoughlin was instructed to answer the letter from Dr. Rumble.

Eighth District Councilor Request

Eighth District Councilor F. G. Eldridge, Valdosta, had requested at the Council meeting that a member of the Medicare Review Board be appointed from Glynn County Medical Society. It was voted to request the society to send in three names as nominations, one of these names to be selected by the Executive Committee to serve on the Board.

Bonding of Employees

Dr. McLoughlin discussed a proposed blanket bond on all employees and it was voted to bond the Secretary-Treasurer for \$10,000, the bookkeeper for \$10,000, and all other employees for \$1,000 coverage.

Interprofessional Council Appointment

Executive Committee appointed John K. Davidson of Columbus to succeed John Stegeman of Athens for a term of three years on the Interprofessional Council.

Hospital Problems

Mr. Kiser presented two hospital problems, one in Eastman and one in Ellijay, and the Executive Committee instructed Mr. Dunaway and Mr. Kiser to keep informed on these matters and also to inform the AMA Law Department.

Appointment of Committees

The Executive Committee appointed the following Committees to serve for 1958-59, these committees to take office at the time of the Annual Session. Pending the appointee's acceptance, the full list of MAG 1958-59 Standing Committees will be published in the May 1958 issue of the *Journal*.

There being no further business, the meeting was adjourned.

MATERNAL AND INFANT WELFARE February 8, 1958

THE MATERNAL AND INFANT Welfare Committee's Subcommittee on Perinatal Mortality met at the MAG Headquarters office, February 8, 1958, 10:00 A.M.

Those present were Dr. Hiram Sharpley, Jr., Chairman; Dr. Dan Kahle, Dr. James Bennett and Dr. Helen

Bellhouse, Secretary.

As historical background at this organizational meeting, the following excerpts from minutes of previous meetings of the Maternal and Infant Welfare Committee, with Dr. Charles Mulherin as chairman, were read:

February 1, 1957

"The first matter of business was a brief report on the present status of the perinatal mortality studies by Dr. McPherson. Tabulation has been completed on the 1954 figures and gives promise of providing a great deal of valuable information to obstetricians; anesthesiologists and pathologists, as well as to pediatricians. As the discussion proceeded, several things became obvious: (1) the need for a control group of live births which survived; (2) the need for more complete reporting of birth weights; (3) the need for more complete recordings; (4) for a subcommittee assigned the task of 'looking behind' the tabulations, for cause and effect; and (5) clarification of terms.

"After discussion it was recommended that two subcommittees be established, one using the present members, with the exception of the two pediatricians, to continue study of maternal deaths. The other subcommittee would be assigned to the perinatal studies, and would include, in addition to the present two pediatricians, two obstetricians, and two general practitioners. The secretary would function to assist both subcommittees. The two subcommittees would meet jointly at least once a year and have planned meetings at other times. The chairman was asked to request that the president appoint the extra members required, probably on a staggered basis.

"For purposes of the Maternal and Infant Welfare Committee, 'perinatal' is to include all fetal deaths after 20 weeks gestation (some figures are available on a weight basis) and neonatal deaths up to 28 days. This is stated as a matter of record, as there still is no nationally or internationally accepted definition. If later, it seems desirable, the neonatal period can be broken down into smaller time intervals. At this point, the pediatricians retired with the statistician to review and plan for the perinatal studies.

November, 1957

"Members appointed to the Perinatal Mortality Subcommittee were H. F. Sharpley, Jr., Chairman; Dan Kahle; E. C. McMillan; Charles G. Breen; Thomas C. McPherson, and James W. Bennett.

"Dr. Mulherin asked the secretary to assist Dr. Sharpley in arranging for a meeting of the subcommittee on perinatal mortality in January. Some materials are available now."

February 8, 1958

This list of materials were discussed at the February 8, 1958, meeting, Academy of Medicine, Atlanta; (1) Perinatal Mortality Definitions; (2) What is Perinatal Mortality?; (3) Book Review—Perinatal Mortality in New York City; (4) A four-step program for reducing perinatal mortality in the nursery; (5) Maps showing live births delivered by physicians and midwives, by county, Georgia, 1956; (6) Perinatal Loss in Modern Obstetrics, authored by Robert E. L. Nesbitt, Jr., M.D. and published by F. A. Davis Company, 1957.

The exhibit plus the materials had been shown at

the 1957 Daytona Obstetric-Pediatric Seminar under the sponsorship of this subcommittee. The committee requested a similar exhibit be set up at the MAG annual meeting, with a one-page description of the problems revealed as a pick-up piece.

The Statistics Section of the Georgia Department of Public Health will be asked to get information for comparison with neonatal deaths on live birth certificates of those infants surviving through the neonatal period.

The subcommittee at this point would like to promote completeness of checking items on the fetal death and live birth certificates. Some items are so incompletely reported that valid statistics are not available.

It was reported that in the near future it may be possible to rank hospitals by their perinatal rates, perhaps by size, as has been done in other states. These reports would be anonymized before release. Each individual hospital could be notified of its ranking and rates.

Dr. Kahle reviewed his experience in several hospitals with perinatal studies and reported that where good thorough studies were made a number of preventable factors could be identified, for example, delayed or no transfusions. Not only pediatricians and obstetricians, but pathologists and anaesthesiologists would be included in a study group.

The chairman suggested a symposium with papers prepared by the individual members for the state meeting in 1959. They directed that the *MAG Journal* give consideration to publication of Dr. Madelene Donnelly's excellent paper, "Reducing Perinatal Mortality in the Nursery."

The chairman advised that each member of the subcommittee should have a copy of Nesbitt's book.

PUBLIC SERVICE COMMITTEE MEETING, February 17, 1958

THE SECOND MEETING of the MAG Public Service Committee was called to order at 5 p.m., Monday, February 17th in the MAG Offices in Atlanta by Chairman John P. Heard. Also present were E. C. McMillan, Macon; Albert M. Boozer, Dalton; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and Mr. John F. Kiser of the MAG Headquarters Office.

Dr. Heard reviewed the activities of the Committee up to the present time, and then called on Mr. Kiser to discuss the publicity for the Annual Session to be held in Macon, April 27-30. Mr. Kiser mentioned the social hour to be held for the press, the establishment of a press room, the advance copies of papers, and pictures of the guest speakers, and other details of the planning involved.

Medical Supplement

Dr. Heard discussed a proposed 16 page supplement to the Sunday newspapers in Georgia for April 27th.

He stated that plans were being made to develop this supplement in cooperation with Bennet & Company, advertising agents and the Committee authorized Dr. Heard, together with Dr. Inglis and Dr. Letton to pass on the acceptability of advertising to be included in the supplement.

Health Columns

Dr. Heard discussed the health column to be published in weekly newspapers in Georgia and stated that the committee assigned to handle this had been very active, having held several meetings in recent weeks.

Indoctrination Booklet

Dr. Heard passed out to members of the Committee the indoctrination booklet which is being mailed to all MAG members. This booklet describes the activities and facilities of the MAG and other medical and related information in Georgia.

State Fairs

Dr. Heard reported a proposal to sponsor a booth at the Southeastern Fair or the State Fair in Macon. It was pointed out that the MAG might be able to obtain an educational booth at no cost to the Association and this matter was referred to Dr. Inglis and his subcommittee to continue investigating this project.

Films

Dr. Heard discussed the AMA produced movie "Whitehall 4-1500" and also discussed the WSB-TV film on Milledgeville State Hospital entitled "The Long Way Back." He appointed Dr. Boozer to head a subcommittee to investigate establishing a film library at MAG headquarters. It was voted to cooperate with a new program of the AMA's consisting of radio spot announcements entitled "Health Magazine of the Air."

Medical Education Week

The Committee discussed recent communications with the American Medical Association in regard to Medical Education Week and decided to encourage component county medical societies to participate in this program.

Auto Safety Campaign

Dr. Heard discussed various types of automobile safety campaigns and stressed the importance of cooperation with the executive branch of the state government. It was decided to wait until the Legislature completed passage of several traffic improvement bills, and to investigate this matter further before participating in an active all out campaign.

There being no further business, the meeting was adjourned.

ANNOUNCEMENTS

The American College of Physicians, Postgraduate Course—May 12-16, 1958, University of Illinois College of Medicine, Chicago, Ill. Course designed to present current views in the diagnosis and treatment of cardiovascular diseases in the child and the adult. In addition to the faculty members from the University of Illinois College of Medicine, senior faculty members from the medical schools of the University of Chicago.

Northwestern Chicago Medical and Stritch School of Medicine, outstanding authorities from various parts of the country will participate in this course. Course will consist of clinical lectures, clinic pathologic conferences and panel discussions. Time for questions and free discussion will be allotted. Registration fee for A.C.P. members, \$30.00; non-members, \$60.00. For further details write The American College of Physicians, E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia 4, Pa.

Refresher Course for Practitioners, Pediatricians, and Clinical Pathologists—May 26-30; June 2-4; June 5-6; The Children's Hospital of Philadelphia and the graduate and undergraduate schools of medicine, University of Pennsylvania. All courses will emphasize the developments of the past few years which are important to the physicians in practice. There will be panel discussions, demonstrations, conferences, and case presentations. The following three courses are offered:

(1) *"Pediatric Advances"* (May 26-30) Curriculum will consist of a series of clinics, conferences, and panel discussions in selected aspects of contemporary pediatrics in which important advances are being made. Category I credit by the AAGP. Tuition, \$115.

(2) *Practical Pediatric Hematology* (June 2-4) Topics will include function, normal ranges, and disturbances of hemoglobin, erythrocytes, leukocytes, and platelets as related to age, prematurity, etc.; performance and interpretation of bone marrow examination; various childhood anemias; splenomegaly and related disturbances; hemorrhagic diseases, etc. Tuition, \$75.00.

(3) *Hemolytic Disease of the Newborn* (June 5-6) Topics include Rh and other blood groups; diagnosis and management of the erythroblastotic infant; demonstrations of laboratory procedures; exchange transfusion. Tuition, \$50.00.

Applications for these courses should be made to Irving J. Wolman, M.D., Children's Hospital of Philadelphia, 1740 Bainbridge Street, Philadelphia 46, Pa.

Hawaii Summer Medical Conference—July 1-3, 1958, Honolulu. The conference is under the auspices of the Hawaii Medical Association, and it will follow the AMA Annual Meeting in San Francisco, June 23-27. Included in the program are breakfast panels, a special afternoon clinic at a local hospital, lectures by outstanding speakers, and various social functions. For additional information write Hawaii Medical Association, Lee McCaslin, Executive Secretary, 510 South Bereania Street, Honolulu 13, Hawaii.

DEATHS

JOHN BAKER FITTS, Atlanta gastroenterologist, died March 5, following an extended illness.

Born in LaGrange, Dr. Fitts graduated from the University of Georgia and Emory University School of Medicine, and later attended New York Hospital where he did postgraduate work.

He was a member of the American College of Physicians, the Southern Medical Association, the Medical

Association of Georgia, the First Presbyterian Church, and the Piedmont Driving Club.

He was on the staff of the Emory, Crawford Long, and Grady Hospitals, and was an instructor at the Atlanta Southern Dental College.

Surviving are his wife, the former Mary Flowers; one daughter, Mrs. Neal Irby, and three grandchildren.

C. C. GIDDENS, 72, Valdosta, died February 15, following an illness of several weeks.

Dr. Giddens was born in Lanier County and attended Emory University School of Medicine. He later did postgraduate work at the New York Polyclinic Hospital in New York after which he began the practice of medicine in Adel, moving to Valdosta in 1913.

Dr. Giddens became connected with the J. N. Bray Building Company and later took over the direction of the company. He was a director of the First National Bank and the First Federal Savings and Loan Association. Recently he retired as director of the Georgia Southern and Florida Railroad.

He was an active member of the Lee Street Baptist Church where he served on the board of deacons, was a Sunday school teacher, and chairman of the pulpit committee and of the building committee.

Survivors are his wife, the former Miss Luelle Bray; three sons, John Bray Giddens, Valdosta; and William T. and C. C. Giddens of Adel; one daughter, Mrs. Leslie Davis, Valdosta; one brother; and two sisters.

THOMAS E. ODEN, 81, Blackshear physician, died February 9, after a long illness. He was a native of Harpeth, Tennessee and received his medical education at the University of Tennessee.

Dr. Oden was a charter member of the Ware County Medical Society, an officer in the U. S. Army Medical Corps during World War I, an emeritus Mason of Blackshear Lodge 270, and a former member of the Blackshear City Board. Dr. Oden was the recipient of two medals for 50 years of service to the medical profession. One was a certificate from the Medical Association of Georgia and the other a diamond pin from the University of Tennessee.

Survivors include one son, Solomon F. Oden, Macon; two daughters, Mrs. Jack Harrison, Blackshear, and Mrs. Anthony Bartley, Abilene, Texas; one sister; and three brothers.

J. F. SCHNEIDER, 66 year old Atlanta physician, was killed February 9 when a single-engine plane which he was flying crashed near Ellijay.

Dr. Schneider had been engaged in the practice of medicine in Atlanta for 34 years. He was a graduate of the College of Medical Evangelists and did postgraduate study at Cook County Hospital in Chicago.

He was a member of Fulton County Medical Society, the American Academy of General Practice, the Southern Medical Association, and the Medical Association of Georgia. He was on the visiting staff of the Crawford W. Long Memorial Hospital.

J. W. STANFORD, JR., Cartersville, died recently at the age of 57. A native of Cartersville, he obtained his

DEATHS / Continued

medical degree at the University of Georgia Medical School in Augusta.

At the time of his death, Dr. Stanford was president of the Bartow County Medical Society, a member of the Sam Jones Memorial Methodist Church, the Royal Arch Masons, and the Medical Association of Georgia. He was also a former member of the Cartersville Board of Education.

He is survived by his wife, and two sons, James W. Stanford III, New Orleans, and Robert W. Stanford, Cartersville.

CLYDE ALLISON STEVENSON, 74, retired Camilla physician, was burned to death when his home was destroyed by fire last February 1. Dr. Stevenson had been a semi-invalid for the past few years as the result of a stroke.

Born in Statesville, N. C., Dr. Stevenson attended Davidson College and the old Atlanta Medical School (now Emory). He began the practice of medicine in Camilla in 1908.

He served as Mayor of Camilla during the years 1918 and 1919 and for a while was on the Board of Education.

Survivors include a sister, Dr. Hazel Stevenson, professor emeritus, Florida State University; three sons, Dr. C. A. Stevenson, Jr., Camilla; Richard Stevenson, Spokane, Washington; and William S. Stevenson, Atlanta.

WILLIAM ALBERT WALKER, retired Cairo physician and surgeon, died February 20 at the age of 91.

Dr. Walker was born in Thomas County. He received his medical degree from the University of Louisville, Louisville, Kentucky, and later did postgraduate study at the New York City Polyclinic and Mayo Clinic.

Long an active member of the Cairo First Methodist Church, he served as chairman of the board of stewards. He was also once mayor of Cairo, a member of the County Board of Education, and a member of the Georgia Legislature.

He is survived by his wife, the former Miss Kate Maxwell; two sons, William A. Walker, Jr., Cairo, and W. Wayne Walker, Tampa, Fla.; four daughters, Mrs. Sam Pierce and Mrs. Ellen W. Lashley, Cairo; Mrs. Mae W. MacIntyre, Albany, and Mrs. J. D. Rogers, Jr., Pelham.

Resolution of the Baldwin County Medical Society on the Death of T. C. Clodfelter

WITH DEEP SORROW the Baldwin County Medical Society records the death on December 22, 1957, of T. C. CLODFELTER. Since 1911 Dr. Clodfelter had been actively engaged in the practice of medicine in the state of Georgia, first in Stephens county, then in Wilkes and Putnam counties. Since October 4, 1937, he had been on the staff of the Milledgeville State Hospital and a member of the Baldwin County Medical Society. By reason of age and years of continuous service he had attained the rank of Life Member in the Medical Association of Georgia. The Baldwin County

Medical Society wishes to extend heart felt sympathy to Mrs. Clodfelter and other members of his family. Over a period of forty-six years Dr. Clodfelter has been a dedicated physician with rare sensitivity to the suffering and needs of the afflicted in all the fields of medicine that he has been associated with and has always attained to the highest esteem of his fellow physicians and loyal to the spirit of organized medicine. The absence of his association with the Baldwin County Medical Society will be keenly felt.

It is resolved that this record of his passing be inscribed in the minutes of the Baldwin County Medical Society, a copy sent to the Medical Association of Georgia for publication in the Journal and to the members of his family.

SOCIETIES

At the March meeting of the BIBB COUNTY MEDICAL SOCIETY Dr. Douglas N. Buchanan, pediatric neurologist at the University of Chicago, was the guest speaker.

H. D. Meaders, Marietta obstetrician and gynecologist, has been named president of COBB COUNTY MEDICAL SOCIETY. Other officers are F. K. Schmidt vice-president, and Hugh S. Colquitt, secretary.

Col. Nicholas F. Atria, Ninth Air Force surgeon, was the guest speaker at a recent meeting of the DOUGHERTY COUNTY MEDICAL SOCIETY. Dr. Atria spoke on the changing trends in medical care in the Ninth AF and discussed the need for continuous medical planning and preparation to meet the realistic needs of modern aerial warfare.

Walter E. Brown, Savannah, retiring president of the GEORGIA MEDICAL SOCIETY was honored at the annual President's Dinner held by the society recently.

The GRADY COUNTY MEDICAL SOCIETY elected the following new officers at a recent meeting: S. L. Hancock, president, and Martin Bailey, secretary. At this same meeting, final plans were approved for the construction of the new Hill Burton Hospital.

Members of the HABERSHAM COUNTY MEDICAL SOCIETY met recently to hear Mrs. Margaret Hardin and Mrs. Jack Courson of Cornelia discuss the Child Welfare Program of the local department.

Dr. Meinhard Roninow of the Yellow Springs Clinic in Fellow Springs, Ohio, was the guest speaker at a meeting of the RICHMOND COUNTY MEDICAL SOCIETY. His topic was "Radiation Hazards in Pediatrics."

The SOUTHWEST GEORGIA MEDICAL SOCIETY met recently to hear Dr. Leigh Gedney, Urologist from Dothan, Alabama, speak. Jack G. Standifer, the society's new president presided at this meeting.

John A. Hightower, Brunswick physician, was the principal speaker at a meeting of the WARE COUNTY MEDICAL SOCIETY recently. Dr. Hightower's talk will deal with fever, its significance and management.

The MUSCOGEE COUNTY MEDICAL SOCIETY held its annual ladies night at the Columbus Country Club last March. Also honored at this dinner and dance were the Council of the MAG and their wives.

At a recent meeting of the TENTH DISTRICT MEDICAL SOCIETY the following three papers were presented: "Glaucoma in General Practice," by Dr. Thomas Gaines, Anderson, South Carolina; "Immediate and Late Repair of Facial Injuries," John R. Lewis, Jr., Atlanta; "Evaluation of Coronary Function," by Goodloe Y. Erwin, Athens. The scientific session was followed by a business meeting and dinner.

PERSONALS

First District

DARNELL L. BRAUNER and JOHN H. ANGELL, Savannah, have announced their association in the practice of obstetrics and gynecology and the removal of their offices to 2512 Habersham Street.

ELLISON R. COOK, Savannah, was a speaker at the program meeting of the Savannah Pilot Club.

CURTIS HAMES, Savannah, conferred with doctors from Harvard Medical School, Cornell Medical School, Jefferson Medical College, Wyeth Research Laboratories, Walter Reed Hospital, and the National Heart Institute, Bethesda, Maryland, recently concerning heart research.

KATRINE RAWLS HAWKINS, Sylvania, was featured recently in the cover article in the *Atlanta Journal-Constitution Magazine*. In celebration of the tribute paid Dr. Hawkins, she was later honored with a surprise dutch luncheon.

H. L. SCHOFIELD, Savannah pathologist, spoke on "Train Savannah People for Savannah Jobs" at a recent meeting of the Women's Auxiliary to the Georgia Medical Society. It has also been announced that Dr. Schofield was named chairman of a special United Community Services committee to seek scholarships for students associated with medicine.

T. P. WARING, Savannah, has been elected president of the Hospital Service Association.

Second District

RUDOLPH F. BELL, Thomasville, has recently been named president-elect of the Southeastern Section of the American Urological Association. Dr. Bell is a past president of the Georgia Urological Association and has headed many committees in the Southeastern Section of the national group.

The Georgia Hospital Service Association, Inc., has re-elected RICHARD F. DICKINSON, Bainbridge, to its board of trustees for a term of three years.

BEN J. GILES, formerly of Augusta, has begun the practice of anesthesiology in Albany.

Third District

A. S. BATTS, Hawkinsville, has been elected the new president of the Medical Staff of the R. J. Taylor

Memorial Hospital.

WILLIAM R. ANDERSON, Americus pediatrician, spoke on the subject of children's diseases to members of the Anthony P.T.A. recently.

DR. and MRS. HUGH J. BICKERSTAFF, Columbus, are planning a spring tour of Europe. While away Dr. Bickerstaff will attend two obstetrical-gynecological meetings.

DR. and MRS. GUY J. DILLARD, Columbus, have recently returned from a ten day vacation in New Orleans.

A. J. KRAVTIN, Columbus, attended a five day postgraduate course in pediatrics at the University of Kansas last March.

LEONARD T. MAHOLICK, Columbus psychiatrist, spoke before the Men's Club of St. Luke Methodist Church recently on the subject of the alliance between science and religion. Dr. Maholick was also a guest speaker at a meeting of the Auxiliary to the Upson County Medical Society.

R. J. PENDERGRASS, Americus, presented a discussion of the controversial prison cemetery of Andersonville at a recent meetings of the Tifton Rotary Club.

Fourth District

ENOCH CALLAWAY, LaGrange, director of the West Georgia Cancer Clinic, presented a program on "Cancer" at a dinner meeting of the LaGrange Pilot Club. Following a film "Time and Two Women," Dr. Callaway answered questions concerning both the film and disease.

Fifth District

At a weekly luncheon meeting of the Decatur Civitan club, J. E. ANTHONY, Decatur, spoke and showed a film on cancer of the lungs.

L. MINOR BLACKFORD, Atlanta, spoke on "Adult Heart Diseases" at a meeting of the Monroe Lion Club.

RICHARD W. BLUMBERG, Atlanta pediatrician, was guest speaker at a meeting of the Rock Springs PTA. Dr. Blumberg's theme was "By Understanding our Children's Physical Health, We Lay Foundations for Better Mental Health."

RIVES CHALMERS, Atlanta psychiatrist, addressed the Floyd County Education Association at the Celanese School on the subject of "School-Home Relationships."

HAL DAVISON, Atlanta, was the featured speaker at a meeting of the Upson County Hospital Auxiliary. Dr. Davison's topic was "You and Your Allergies."

The *Journal* regrets to announce the death of Mrs. Roberta Cook Dorough, wife of W. S. DOROUGH of Atlanta.

WALTER C. EARLE, Atlanta, has taken a year's leave of absence from the Veterans Administration to serve with the Pan-American Sanitary Bureau, Regional Office of the World Health Organization, at Kingston, Jamaica. Dr. Earle is medical officer in charge of the Pan-American Bureau's training center for techniques in malaria eradication.

MURDOCK EQUEN, Atlanta, was an honor guest

PERSONALS / Continued

recently at the thirteenth annual Georgia Celebrity Breakfast sponsored by the National League of American Pen Women at the Piedmont Driving Club. Dr. Equen has recently announced the limitation of his practice to laryngoscopy and bronchoscopy.

DR. and MRS. A. H. LETTON, Atlanta, recently attended the meeting of the Southeastern Surgery Conference in Baltimore. Dr. Letton is the treasurer and Mrs. Letton is the president of the Woman's Auxiliary of this organization.

The *Journal* regrets to announce the death of Harold G. Morse, Mount Dora, Florida, father of CHESTER F. MORSE, Decatur.

WILLIAM A. HOPKINS, Atlanta, addressed the Rotary Club of Monroe on "New Advances in Heart Surgery."

JAMES T. KING, Atlanta, was the guest speaker for the Philadelphia Laryngological Society recently.

RICHARD E. KING, Atlanta heart surgeon, spoke to the Carrollton Pilot Club on the prevalence of heart disease in the nation.

At a conference of the Brain Research Foundation in New York CARL C. PFEIFFER, Atlanta, reported on a brain stimulant which may be effective in the treatment of many mentally ill patients.

J. L. RICHARDSON, Atlanta, recently addressed the Women's Auxiliary of Winder on the subject of heart disease.

JOSEPH S. SKOBBA, Atlanta psychiatrist, was the speaker at a meeting of the Darlington Mothers Club on the subject of "Emotional Factors in Education."

R. C. WILLIAMS, Atlanta, spoke to the Cartersville Rotary Club recently. His topic was "Hospital Construction Program in Georgia."

Sixth District

CHARLES C. BENTON, E. L. FRY, and WALTER F. HOMEYER, JR., of Macon, announce the association of JAMES M. WELLS, and CALVIN F. ALLEN in the practice of Anesthesiology.

R. G. FERRELL, Macon, has been named to the board of directors of the Georgia Industrial Home.

CHARLES H. FIELD, Macon neurosurgeon, addressed the Mercer University student body recently on "Post-War Teen-Agers."

A. M. PHILLIPS, Macon, has been elected vice-president of the Bankers Health and Life Insurance Company. Previous to his appointment Dr. Phillips held the title of medical director of the company, a position which he will retain. He is also a member of the State Board of Health, Board of Trustees of the United Givers Fund, and Board of Trustees of the Georgia Industrial Home.

THOMAS L. MOSS, Macon cardiologist, was the guest speaker at a recent meeting of the Milledgeville Rotary Club.

Seventh District

LEE H. BATTLE, JR., Rome physician, has been elected president of the Chamber of Commerce of Rome and Floyd County.

E. V. PATRICK, Carrollton, has temporarily closed his practice to study internal medicine under a fellowship at Emory University Hospital.

Eighth District

RALPH D. ROBERTS, Fitzgerald, spoke on "Your Child's Health" at a meeting of the Roanoke PTA.

Ninth District

Notice has been received that C. L. AYERS, Toccoa, has recently resigned as secretary treasurer of Stephens County Medical Society, a position which he has held for 55 consecutive years. Tribute should certainly be paid Dr. Ayers for his many years of devoted service.

J. D. SCHULER, Ellijay, has announced that William Glenn Trambly, formerly of Los Angeles, California, will now be associated with him in the practice of medicine.

H. H. LANCASTER, Gainesville, discussed the possibilities of obtaining a physician for Dawsonville at a meeting of the Dawsonville Lions Club.

Tenth District

HENRY W. BAILEY, a native Augustan, has announced that he will open offices there for the practice of surgery. Dr. Bailey is a graduate of the Medical College of Georgia. He served his internship at Brooke Army Hospital, San Antonio, Texas, and was later a resident surgeon at University and Talmadge Memorial Hospital.

WILLIAM F. HAMILTON, Augusta, recently gave a lecture at Columbia University on "Physiology of Cardiac Output."

WILLIAM E. BARFIELD, Augusta, recently addressed members of the Ohio Academy of General Practice.

ROBERT B. GREENBLATT, presented a paper before members of the Academy of Medicine of Cincinnati in Cincinnati, Ohio.

GOODLOE Y. IRWIN, Athens, spoke to the Greensboro Lions Club recently on the purpose and function of the Georgia and American Heart Association.

The board of trustees of the American Medical Association has elected VIRGIL P. SYDENSTRICKER, Augusta, to be the recipient of the 1958 Joseph Goldberger Award for his work in clinical nutrition. This award, given in cooperation with the Council on Funds and Nutrition, consists of a plaque and cash prize. He will be awarded the honor at the AMA meeting in San Francisco, June 23, when he will present the Goldberger lecture.

The *Journal* regrets to announce the death of Mrs. J. William Thurmond, Sr., mother of J. W. THURMOND and ALLEN GEORGE THURMOND, of Augusta.

- EDITOR
- Edgar Woody, Jr., M.D.
- MANAGING EDITOR
- Helen L. Hendry
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Journal

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LETTER

FINAL AGREEMENT REACHED IN TALMADGE HOSPITAL DISPUTE

IN AN unprecedented move during the *104th Annual Session of the Medical Association of Georgia, April 27-30, 1958, Macon, the House of Delegates at its first session acting as "a committee of the whole" unanimously adopted the new "PROPOSED OPERATION POLICIES FOR THE MEDICAL COLLEGE OF GEORGIA AND THE EUGENE TALMADGE MEMORIAL HOSPITAL AND PROPOSALS FOR RELATIONS WITH MEDICAL SOCIETIES AND ASSOCIATION."

This action culminated five years of negotiations between the Medical College of Georgia, the Talmadge Hospital, and the Board of Regents on the one hand and the Richmond County Medical Society and the Medical Association of Georgia on the other.

The final plan was first agreed to by representatives of all parties concerned at a meeting in Augusta on April 15, 1958. This meeting was convened by a Mediation Committee of the American Medical Association and the Association of American Medical Colleges.

Following this meeting, the proposed policies were approved by the Richmond County Medical Society, the Faculty of the Medical College of Georgia, and the Board of Regents.

Essential to the successful carrying out of this agreement will be the operation of the Liaison Committee composed of two representatives of the Medical College of Georgia and ten MAG members representing the ten congressional districts. In addition there will be an Executive Committee composed of the two Medical College Representatives, two members of the Richmond County Medical Society, and one member of the Medical Association of Georgia who resides outside Richmond County and chosen by the Council of the MAG.

W. Bruce Schaefer of Toccoa, Immediate Past President, has been appointed by Council as the MAG representative.

There follows below the full text of the proposed policies as approved by the MAG House of Delegates:

Liaison Committee

It was agreed that a liaison committee would be established to be constituted as follows. The dis-

trict medical societies shall propose two names each and the Medical College of Georgia is to choose one name of the two. One member from each of the ten districts will provide ten members of the Liaison Committee. In addition, the Liaison Committee shall include an Executive Committee of two members of the Richmond County Medical Society to be chosen by RCMS, two members from the Medical College of Georgia to be chosen by the Medical College, and one member of the Medical Association of Georgia who resides outside of Richmond County, to be chosen by the Council of the Medical Association of Georgia. The full fifteen-man Committee shall meet once every six months. The Executive Committee, the Chairman of which shall be the MAG representative, shall meet as often as necessary and shall have power to deal with all matters subject to report to the full Liaison Committee.

Admissions

It is not and shall not become the policy of the Medical College of Georgia and the Eugene Talmadge Memorial Hospital to enter into the competitive practice of medicine. Admission of patients of unusual teaching interest shall be favored. It is realized, however, that emergencies and unusual circumstances will arise in which patients who are not indigent will require the services of these institutions. No other pay (private) patients shall be admitted. This policy shall apply to both in and out patients.

The term "unusual circumstances" shall be understood to apply to those patients whose problems in the opinion of their referring doctor can be especially appropriately cared for at the Eugene Talmadge Memorial Hospital. Any question or controversy arising will be referred to the Liaison Committee in writing for the Committee's consideration.

No patient may be accepted by the institution except by proper referral of his *regular physician*.

Pay (private) patients admitted under the category of emergencies without referral by a doctor should be discharged or transferred from the Eugene Talmadge Memorial Hospital when and if their condition permits.

Disposition of Professional Fees

Faculty members providing professional services to patients of the Hospital shall determine the charges for such services. The fees paid to the faculty members for such professional services may be

paid into a special research fund. This special research fund shall not accrue to the general budget of the Board of Regents, Eugene Talmadge Memorial Hospital, or the Medical College of Georgia. Such special fund shall be used exclusively to defray the cost of medical research projects.

The faculty of the Medical College of Georgia shall determine the character and extent of such medical research projects to be supported by these funds. There shall be no contractual obligation be-

tween the Medical College of Georgia and its faculty members to pay such professional fees into the special Research Fund.

Public Relations

Publicity emanating from the Medical College of Georgia and the Eugene Talmadge Memorial Hospital shall be in good taste and consistent with the standards of the American Medical Association and the standards set by the Liaison Committee.

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THE USE OF CORTISONE IN SEVERE INFECTIONS

Two illustrative cases are reported

S. H. STORY, JR., M.D., *Valdosta, Georgia*

RECENT REPORTS in the literature have suggested the use of ACTH or one of the adrenocortical hormones as therapeutic adjuncts in severe infectious diseases. The use of these agents is empirical since there has been no experimental evidence to prove that a relative adrenal insufficiency often exists in severe infections.

Spink now advocates the concomitant use of adrenal steroids and appropriate antibiotics in such serious infections as typhoid fever, brucellosis, and gram negative bacteremias.¹ In patients critically ill with pneumococcal infections, the steroids are used in conjunction with penicillin. In tuberculous meningitis and patients critically ill with tuberculosis, the adrenal hormones are used as adjuvant therapy with the antituberculous drugs. To quote Dr. Spink, "In some instances the judicious and prompt use of these steroids can prevent fatalities."²

Nelson has reported on the use of cortisone in patients severely ill with viral hepatitis.³ Havens also recommends the use of steroid therapy for patients with severe progressive hepatitis, for patients with hepatic coma, and for patients with cholangiolitic hepatitis.⁴

Case Histories

The two cases to be presented here illustrate the value of adjuvant cortisone.

Case One—Mrs. O. R. W., a 44-year-old married white female with a 15 year history of "migraine" headaches, was admitted to Pineview General Hospital on August 23, 1957, with a four day history of severe generalized headache with almost constant nausea and vomiting. She was dehydrated and ap-

peared quite ill. Her vital signs were, blood pressure, 120/60; temperature, 99 F; pulse, 76 per minute; and respiration, 22 per minute. She has a rather dark complexion and jaundice was not detected initially. Physical examination was essentially negative except for dry skin and loss of turgor. The initial impression was dehydration due to vomiting associated with migraine headaches. The laboratory technician reported that the serum was jaundiced and that the urine was orange and contained bile, specific gravity 1.027. Hemoglobin: 11.8 gms; hematocrit 38.5 per cent; and WBC, 6,800 with 75 per cent mature neutrophils and 24 per cent "normal" lymphocytes. Van den Bergh revealed 3.30 mgm. of direct bilirubin and 2.25 mgm. indirect on August 24, 1957; the NPN was 25 mgm. per cent.

The diagnosis was changed to infectious hepatitis and vigorous intravenous glucose therapy and intravenous vitamins were begun. She received 4000 cc. of 10 per cent glucose solution daily. Chloral Hydrate was used for headache and sedation. Nevertheless, her jaundice progressed and on August 25, 1957, she was considered to be in critical condition. Liver function tests done on August 26, 1957, revealed a serum bilirubin, 9.4 mgm. with 6.0 mgm. direct; alkaline phosphatase 3.1 BU; thymol turbidity 20.5 units, and Cephalin-Cholesterol flocculation 4+ in 24 hours. At that stage clinically she was deeply jaundiced, lethargic, and complained of right upper quadrant tenderness. No liver "flap" was present. The liver and spleen were not palpable. She had total anorexia.

On the evening of August 25, 1957, it appeared

Date	Serum Bilirubin	Thymol Turbidity	BSP	Alkaline Phosphatase	Ceph Flocc.	Remarks
8-24	5.55					Hospitalized
8-26	9.4	20.5		3.1	4 +	Cortisone Started
9-4	2.55	17.5				
9-11	1.85	15.3				Cortisone discontinued
9-18	1.35	14.0	25.8%	2.4	3 +	Discharged. Bedrest at home
10-4	0.65	13.3	4.7%	1.9	2 +	Vitamins. Bedrest continued
10-17	0.80	14.0		1.4	1 +	
11-14	0.88	7.5	3.5%			Ambulatory

Figure 1: Chart outlining treatment of case and showing progress of patient.

that the patient might have acute yellow atrophy, and intramuscular cortisone was started, 100 mgm. q.6.h. The intravenous glucose was continued with 40 milliequivalents of potassium chloride added to one of the bottles each day. After 48 hours the dosage of cortisone was lowered to 75 mgm. q.6.h. and on August 29, 1957, to 50 mgm. q.6.h. It was gradually reduced thereafter.

After initiation of steroid therapy the patient made progressive improvement. The jaundice had begun to subside (Bilirubin 2.55 on 9/4/57) and she began to eat and feel better. Cortisone was discontinued on September 10, 1957, ACTH Gel

was given from September 7, 1957, through September 15, 1957. No relapse occurred when the steroid therapy was stopped. She had none of the complications of adrenal hormone therapy.

On her last office visit on November 19, 1957, she was weak but felt very well otherwise. Her BSP revealed 3.5 per cent retention, bilirubin, 0.88, and thymol turbidity, 7.5 units.

Case Two—Mrs. G. F. E., an 81-year-old white widow was admitted to Pineview General Hospital on September 13, 1957, complaining of weakness, shortness of breath, and swelling of her feet. Vital signs were blood pressure, 150/90; pulse rate, 120 per minute and irregular; rectal temperature, 100.8 F; respiration, 24. There was neck vein distention, rales scattered throughout both lung fields but more marked at the right base, an enlarged heart with an irregular rhythm and rate of 150 to 160, right upper quadrant tenderness, and four plus pedal and pretibial edema. Hemoglobin was 10.3 grams; hematocrit 36 per cent; WBC, 9,000. Electrocardiogram revealed atrial fibrillation with a ventricular rate between 150 and 160. The chest X-ray revealed consolidation in the right lower lobe.

She responded well to bedrest, oxygen, rapid digitalization, mercurial diuretics, and penicillin therapy. She was discharged on the eighth day on maintenance digitalis and oral penicillin. At that time she was feeling well and her ventricular rate was 75. There was no residual edema.

Two days later she was readmitted because of chills, fever, marked weakness, and lethargy. Her temperature was 103.6 F; pulse, 96 per minute and irregular; respiration, 24 per minute; and blood pressure, 146/80. Her skin was flushed, and there was dullness to percussion, bronchial breathing, and



Figure 2: Chest x-ray of case two revealing consolidation in right lower lobe.

coarse rales over the right lower lobe area. She was coughing frequently but producing no sputum for bacteriologic study. She was given intravenous fluids, digitalis, and parenteral penicillin.

After 24 hours of treatment she seemed critically ill and about to succumb to her infection with spikes of fever to 104° F and 105° F, hard chills, and drenching sweats. Penicillin was stopped, and tetracycline and erythromycin were started parenterally. With the idea of giving these new agents time to combat the unknown organism, cortisone was started in a dosage of 100 mgm. I.M. q.6.h. on September 23, 1957, and continued in gradually decreasing dosage until October 3, 1957. Again ACTH Gel was given for a few days prior to and after cessation of cortisone.

Thirty-six hours after initiation of the tetracycline, erythromycin, and cortisone, the patient was afebrile and greatly improved. Portable chest X-ray on September 28, 1957, revealed almost complete clearing of the pneumonic process in the right lower lobe.

Despite supplemental potassium therapy (40 to 80 milliequivalents daily) this patient developed rather severe digitalis toxicity which prolonged her hospital stay. She was discharged on October 12, 1957, on Gitalagin 0.25 mgm. every other day. One month later her apical rate was 70 and she was feeling quite well.

Summary

These two cases represent successful response to desperation steroid therapy in the face of overwhelming infection. In each instance the patient seemed to have little chance for survival prior to receiving cortisone. In case one the offending agent was a virus and in case two probably a bacteria. The response of each patient was quite impressive to all concerned.

2200 Glyndale Drive



Figure 3: Second chest x-ray showing almost complete clearing in right lobe.

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TUTTLE TO FILL RESEARCH CHAIR AT EMORY

DR. ELBERT P. TUTTLE, JR., has been named to the chair of cardiovascular research in the Emory University School of Medicine. The appointment was announced by Dean Arthur P. Richardson of the Emory medical school and Linwood Beck, Executive Director of the Georgia Heart Association.

Dr. Tuttle has been an assistant professor of medicine at Emory since July, 1957, when he was appointed head of the section of renal diseases and electrolytes.

A graduate of Princeton College and the Harvard medical school, Dr. Tuttle was appointed Research and Clinical Fellow in Medicine at Harvard in 1953, where

he was named assistant in medicine in charge of the renal physiology laboratory in 1955. During this period he was also a research fellow for the National Heart Institute.

Dr. Tuttle's research interest is in the mechanisms of control of the fluid and salt content of the body. His investigations for the next several years will be devoted to the relationship between high blood pressure, the excretion of salt by the kidney, and the output of the heart.

The Georgia Heart Association provides partial support for the position in cardio-vascular research.

UNCONTROLLABLE OBSTETRICAL HEMORRHAGE

A plea is made for the early recognition and treatment of afibrinogenemia

GORDON W. JACKSON, M.D., *Augusta, Georgia*

HEMORRHAGE IS ONE of the most common causes of maternal mortality in this country today. Afibrinogenemia, a depletion of the circulating blood fibrinogen, is a fairly frequent cause of maternal hemorrhage and occasionally death, occurring approximately once in every 1,000 deliveries. Although afibrinogenemia had been suggested many years ago it is only during the past decade that it has been recognized and an effective treatment found.

History

As early as 1901 De Lee drew attention to the fact that some women with abruptio placenta died of hemorrhage that was hemophilia-like in character. Wilson in 1922 noted that an inhibition of coagulation may accompany abruptio placenta. In studying the blood chemistry of patients with abruptio placenta, Deichman in 1936 found extremely low fibrinogen levels. However, it was not until 1949 that Maloney, Egan, and Gorman utilized this information and successfully treated a case of afibrinogenemia using fibrinogen.

Clotting Mechanism and Etiology

The clotting mechanism is not so simple as depicted below, but this diagram has sufficed for practical purposes.

Prothrombin + thromboplastin + calcium =
thrombin

Thrombin + fibrinogen = fibrin

The suggested etiology for the depletion of circulating fibrinogen is threefold. (1) Thromboplastic material from the placenta, decidua, or amnionic fluid enters the circulation causing intravascular clotting with depletion of fibrinogen. (2) Fibrinolytic enzymes enter the maternal sinusoids from necrotic decidua and destroy the circulating fibrinogen. (3) Depression of fibrinogen production in the liver is due to toxic fetal or maternal substances. The first of these is thought to be by far the most important. Page explains this process in his statement, "The depletion is probably due to the escape of placental or

decidual thromboplastin into the maternal circulation. This converts prothrombin to thrombin which in turn converts fibrinogen to fibrin and the latter is deposited spottily over a very large vascular surface." This process reduces the fibrinogen level to such an extent that clotting is impossible or at best unstable. Predisposing factors associated with this condition during pregnancy or the post-partum period are: (1) Premature separation of the placenta, (2) Presence of fetal death in utero, (3) Retained products of conception, (4) Amnionic fluid embolus.

Diagnosis

This is a very easy diagnosis to make requiring only familiarity with the syndrome, a sterile syringe and needle, and clean test tube. This complication should be considered in any obstetrical hemorrhage. Numerous methods for determination of fibrinogen levels have been devised with the normal values ranging from 300 to 700 mgm per cent, and coagulation defects occurring with values in the range of 100 to 150 mgm per cent. However, a very simple, practical, and ample diagnostic procedure consists of placing three to five cc of venous blood in a plain clean dry test tube and observing for clot formation and stability of the clot. In a normal individual the clot formed will be large and resist shaking. When fibrinogen is low the clot is small, blood watery, and the initial clot may readily lyse in a matter of minutes. In established or suspected cases of abruptio placenta this clot observation test should be performed every thirty minutes to two hours depending on the severity of hemorrhage. The clot observation test should be performed in every obstetrical hemorrhage unless some other definite cause can be established. In the case of a dead fetus in utero, the depletion of fibrinogen is a gradual process and the clotting mechanism should be checked weekly after the second week.

Management

Although there are a number of other procedures

and agents which are beneficial, fibrinogen is specific for this condition. (1) In the presence of bleeding, whole blood should be administered, however, it should be emphasized that blood can rarely supply the necessary fibrinogen. Some twenty pints of blood would be necessary in the usual case and even this may not be sufficient. (2) In an undelivered patient with abruptio placenta, the membranes should be ruptured artificially; this will tend to decrease intrauterine pressure, consequently decreasing the amount of thromboplastin being forced into the maternal circulation, and also hasten the completion of labor thereby removing the cause. (3) A decision as to the method of delivery, vaginal or cesarean, should be made on the merits of each individual case. The coagulation mechanism should be stabilized prior to delivery. (4) If the patient is already delivered, routine measures for the control of post partum hemorrhage such as oxytocic, intravenous pitocin drip, and uterine pack should be employed. Let me emphasize that no reliance should be placed on these measures insofar as stopping the bleeding is concerned. (5) Oxygen may be helpful for both mother and baby. (6) Fibrinogen should be administered intravenously with the dosage usually four to eight grams, being controlled by the clot observation test. In the past most hospitals have been unable to obtain fibrinogen. Today it is available and should be kept in every hospital that treats obstetrical patients since speed is essential in the treatment in order to prevent fatal irreversible changes as a result of hemorrhage and shock. Commercial companies supply one gram vials in the desiccated form which is stable under refrigeration for five years at a cost of approximately \$30.00 per gram. It may also be obtained from the Red Cross. Unfortunately their supply is so limited that they cannot supply hospitals

with "on hand" stock. Hospitals participating in the Red Cross program may obtain it on demand if needed. This is supplied at no charge. It is suggested that participating hospitals have on hand at least six grams and preferably ten grams. This would cost a maximum of \$60.00 a year which is certainly nominal when one considers that this is the only life saving treatment for this syndrome.

Conclusion

A brief history and explanation of afibrinogenemia is given. A simple adequate method of diagnosis is explained and an outline of therapy is suggested with special emphasis on the necessity of immediately available fibrinogen. The method and cost of obtaining this fibrinogen is explained.

Medical College of Georgia

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VOLUNTARY HEALTH INSURANCE FOR THE AGED

AN ARTICLE IN the April, 1958 issue of the *Chronic Illness Newsletter*, published bi-monthly by the AMA Council on Medical Service, describes some of the methods by which persons over 65 are being increasingly included in voluntary health insurance coverage. The article breaks down various groups within this over-65 population by type of protection or lack of it. It describes a number of the programs currently under way by the Blue Shield-Blue Cross plans, private insurance companies, industry, and others in extending voluntary health protection for these groups, and analyzes the socioeconomic forces behind a rising trend in coverage of this section of the population. Additional copies of this issue of the

Newsletter are available on request from the AMA Council.

The AMA is taking active interest in other geriatric problems. At present, the Association is supporting legislation that would request President Eisenhower to call a 1960 White House Conference on the problems of the aged. In Washington, the Joint Council to Improve the Health Care of the Aged announces in Chicago a broad program to insure that older citizens have the medical care they need. One immediate council project is arrangement, in cooperation with the Department of Health, Education, and Welfare, of a National Conference on Homemaker Services.

VENOUS MESENTERIC THROMBOSIS

Five illustrative cases are reported and the literature is reviewed

JOHN E. SKANDALAKIS, M.D., *Atlanta, Georgia*

MESENTERIC VENOUS THROMBOSIS appears to be a distinct clinical entity among the group of conditions generally referred to as mesenteric vascular occlusions. In contrast to catastrophic arterial occlusions, mesenteric venous thrombosis follows a different course. The latter is much more amenable to surgery, and because of the more insidious onset of symptoms, earlier recognition of this entity offers an opportunity for early and adequate treatment in a large percentage of cases. This paper reports five cases, two of them successfully treated surgically.

The first description of this abdominal catastrophe was presented by Antonio Benevieni¹ (C. 1440-1502), the so-called "father of pathological anatomy." According to Leonardo², this great Florentine physician described the case which occurred in

TABLE 1

HOSPITAL	YEAR	GENERAL POPULATION	NUMBER OF CASES		TOTAL	PERCENT
			ARTERY	VEIN		
A	1947-1955	69689	2	1	3	0.0043
B	1947-1955	76417	10	4	14	0.0182
TOTAL		146106	12	5	17	0.0117
PERCENT			0.0082	0.0034		
SURGICAL ADMISSIONS						
A	1947-1955	29267	2	1	3	0.010
B	1947-1955	32836	10	4	14	0.042
TOTAL		62103	12	5	17	0.027
PERCENT			0.019	0.008		

Table 1: Incidence of mesenteric thrombosis.

one of the Siamese twins in whom he found "callus among and obstructing the mesenteric veins." Later, in 1843, Tiedman³ also identified the disease, and three years later Virchow⁴ gave the first pathological description of mesenteric embolism and thrombosis. In 1895, J. W. Elliot⁵ of the Massachusetts General Hospital, Boston, reported the recovery of a patient with venous mesenteric thrombosis following operation.

Over 1,400 reports of mesenteric vascular occlusion are recorded in the literature, but most authors

have failed to differentiate between arterial and venous occlusion. In 1935, Warren and Eberhard⁶, suggested that mesenteric venous occlusion is a distinct entity, separate from mesenteric arterial occlusion.

Incidence

The incidence of mesenteric vascular occlusion,

TABLE 2

AUTHORS	YEAR	PERCENT
TROTTER -----	1913 -----	41.0
LARSON -----	1931 -----	44.0
WHITTAKER & PEMBERTON --	1938 -----	45.0
MOORE -----	1941 -----	75.0
LAUFMAN & SCHEINBERG --	1942 -----	75.0
BOWEN -----	1942 -----	43.8
McCLENAHAN & FISHER --	1948 -----	20.0
JOHNSON & BAGGENSTOSS --	1949 -----	58.0
WILSON & BLOCK -----	1956 -----	16.0
SKANDALAKIS et. Al. --	1956 -----	41.7

Table 2: Percentages reported in the literature of venous mesenteric thrombosis.

TABLE 3

AGE	SEX		TOTAL
	MALE	FEMALE	
0-30	-	-	0
31-40	-	1	1
41-50	1	-	1
51-60	1	-	1
61-70	-	1	1
71-80	-	-	0
81-90	1	-	1
TOTAL	3	2	5

Table 3: Age and sex in mesenteric venous thrombosis.

according to Maingot⁷, is about 0.1 per cent of all surgical admissions to a large general hospital. *Table 1* gives our findings from two hospitals in the Atlanta area.

According to Warren and Eberhard, the incidence of venous mesenteric thrombosis is about 0.003 per cent of the general hospital admissions. The figures do not agree concerning the percentage of cases of venous mesenteric thrombosis in comparison with arterial occlusion. (*Table 2*)

Difference in incidence according to sex is not noteworthy. The majority of cases occur between the ages of twenty and sixty; the peak of incidence being around fifty. (*Table 3*)

Etiology

Table 4 includes all the possible causes of venous mesenteric thrombosis that we have found.

In eight of 99 cases reported by Johnson and Baggenstoss⁸, no cause was found in about eight per cent. From the 53 cases reported by Berry and Bougas⁹, 13 were of the agnogenic or idiopathic type. Both primary and secondary venous occlusions are always thrombotic in nature and offer the same problems as thrombosis in veins elsewhere. In our cases the possible etiologic factors are listed in *Table 5*. The analysis of *Table 5* reveals that suitable cause of venous thrombosis was found in every

TABLE 4				
POSSIBLE ETIOLOGIC FACTORS OF VENOUS MESENTERIC THROMBOSIS				
VENOUS MESENTERIC THROMBOSIS				
PRIMARY- (Idiopathic or Agnogenic) NO CAUSE CAN BE FOUND				
SECONDARY				
MECHANICAL	INFECTION	HEMATOGENOUS	OTHER CAUSES SUCH AS	COMBINATION OF THESE FACTORS
SURGERY-Intra or Extra Abdominal	INTRA-ABDOMINAL (Appendicitis, etc)	POLYTHEMIA VERA	UREMIA	
TRAUMA-Direct or Indirect of the Mesentery		SPLENIC ANEMIA	COMA	
TUMORS-Pressure	EXTRA-ABDOMINAL (Thrombophlebitis Mastoiditis, etc)	LEUKEMIA, ETC.	APOPLEXY	
PORTAL STASIS			SENILE DEMENTIA	
ADHESIONS				
VOLVULOUS				
HERNIA				

Table 4: Possible etiologic factors of venous mesenteric thrombosis.

case but one, about 20 per cent for the agnogenic type and 80 per cent for the secondary type. These figures compare closely with those in the literature.

Pathology

Venous mesenteric occlusion is always thrombotic. Involvement of the bowel varies from a few inches to all of the small bowel and the descending and transverse colon. (*Fig. 1, 2, 3.*) In rare cases, the left colon can be involved. (*Fig. 4*) The part of the intestine involved, the length of the involved segment, and the degree of pathological changes depend upon:

- (1) The degree of obstruction of the vein due to thrombosis of some part of the portal vein, the splenic vein, the superior or rarely the inferior mesenteric vein and their tributaries, or the arcades and vasa recti. (*Table 6*)
- (2) The rapidity of the development of the thrombosis.
- (3) The duration of the process.
- (4) The general condition of the patient.

The changes of the bowel when they occur are those of hemorrhagic infarction. However, infarction is not a constant phenomenon. In 99 cases reported by Johnson and Baggenstoss, 52 showed infarction. In our five cases infarction was present in four. In the literature there are reported cases in which the portal or mesenteric veins were completely obstructed without evidence of intestinal infarction. Johnson and Baggenstoss write, "It seems reasonable

TABLE 5	
AFTER GASTRECTOMY	1
AFTER SPLENECTOMY (?)	1
THROMBOPHLEBITIS	1
COMBINATION OF FACTORS (Surgery - Uremia - Tumor)	1
NO CAUSE	1

Table 5: Etiology of venous mesenteric thrombosis in our cases.

to believe that when venous thrombosis occurs slowly, the collateral circulation which develops is sufficiently extensive to prevent infarction, providing the small veins are not thrombosed."

The transition from normal to abnormal intestines

TABLE 6	
PORTAL, SPLENIC, and SUPERIOR MESENTERIC -----	1
PORTAL, SPLENIC, SUPERIOR MESENTERIC and INFERIOR MESENTERIC -----	1
SUPERIOR MESENTERIC -----	3
TOTAL	5

Table 6: The location of thrombosis in our cases.

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is somewhat gradual at the proximal portion but abrupt at the distal end. The pathological changes in the intestinal area follows: edema, congestion, extravasation of blood into the wall of the gut, its lumen and the peritoneal cavity, cyanosis, distention,

Physical Signs

There is generalized tenderness of the abdomen but rigidity is very slight or absent, and rebound tenderness if present, may shift from time to time to overlie the involved segment of bowel. Free fluid is present in increasing amounts, and the involved intestine is filled with fluid and blood rather than

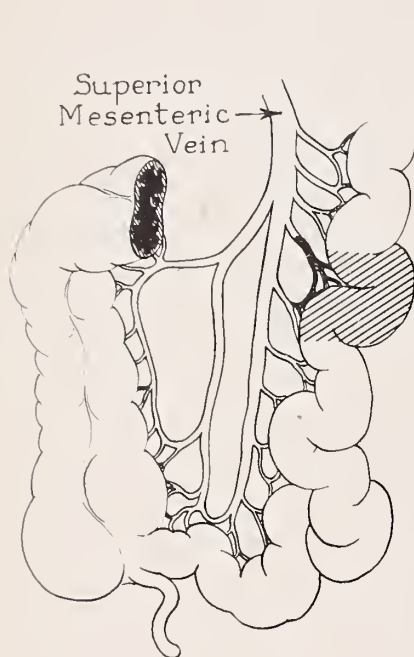


Fig. 1

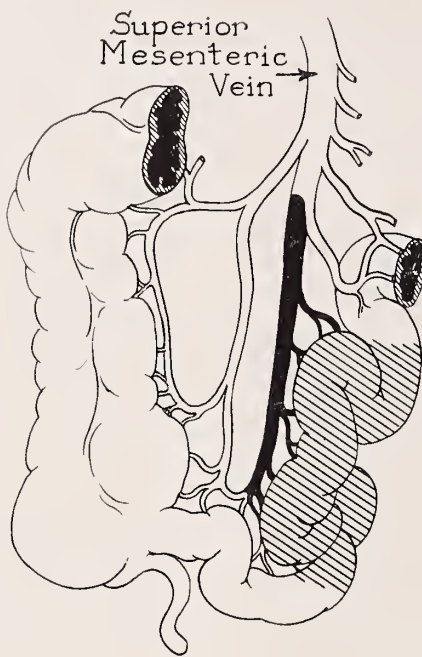


Fig. 2



Fig. 3

Figures 1, 2, 3: Involvement of the bowel in venous mesenteric occlusion varies from a few inches to all of the small bowel.

and finally gangrene with perforation. The mesentery is usually thickened to two to five cm. and the mesenteric veins contain multiple thrombi, but nevertheless, visible or palpable arterial pulsations are often present. The microscopic picture of the intestinal wall is that of edema and infarction.

Symptomatology

In venous mesenteric thrombosis the onset and course is usually slow, and often hemorrhagic infarction occurs without gangrene. Blood is usually present in the stool and spontaneous recovery is possible. The clinical onset may be described as an insidious discomfort which usually progresses to a diffuse colicky pain lasting for several days. Vomiting is frequently present at the onset, but is usually overshadowed by the pain. The vomitus occasionally contains blood and the stools often do. Fecal vomiting has been reported. Diarrhea is a prominent symptom, but constipation had been reported. Abdominal distention is not marked in approximately 70 per cent of the cases, and when it is present, it is usually attributed to the increase in the intraperitoneal fluid. Shock is rare. According to Whittaker and Pemberton¹⁰, only seven per cent of the cases demonstrated shock.

the usual gas contents seen in mechanical obstruction. This would obviously explain the lack of tympanic findings on percussion. As the course progresses, dehydration becomes marked due to the interstitial fluid loss. Peristalsis may be present, diminished, or absent.

Laboratory Findings

1: Blood: The leukocytic count usually varies from 20,000 to 40,000.

2. Stools: May or may not contain blood. A positive stool guaiac test is helpful but a negative test does not rule out the possibility of venous mesenteric thrombosis.

3. X-ray Examination: The x-ray findings may be of considerable assistance. Rendich and Harrington¹¹ first discussed the x-ray findings in this condition. There is usually localized distention of the intestine down to the region of the splenic flexure of the colon. The reason for this limitation is, Rendich and Harrington think, due to the anatomy of the superior mesenteric vessels. In most cases gaseous distention is encountered in multiple small intestinal loops and fluid levels are often seen. The single loops are not markedly hoop-shaped as in

mechanical obstruction and the levels are shorter. There is a rapid increase to be seen in the number of affected loops present in the roentgenogram made a few hours after the first film, a finding rarely observed in simple mechanical obstruction. If a barium swallow is given, there is a marked retention of the contrast media in the involved loops. Small intestinal loops are not as dilated as in pure mechanical obstruction, and the mucous membrane pattern shows thickening and rigidity due to edema. The moderate separation of gas-filled loops of small bowel suggests the presence of considerable intra-peritoneal fluid.

Diagnosis

An accurate diagnosis is seldom made from the symptoms, the physical signs, and laboratory findings; but is usually made at operation. Trotter¹² collected 367 cases of mesenteric vascular occlusions, and diagnosis was made in only 13 cases before operation.

In our five cases, diagnosis before operation was made in one case and was suspected in another. Usually the pre-operative diagnosis is "acute abdomen" because even the most experienced physician may find pre-operative diagnosis difficult.

Mortality

The figures on mortality from venous mesenteric thrombosis are difficult to discover because most authors did not try to differentiate between arterial and venous occlusion.

In our five cases four underwent surgery. Resection was done on three but was not advisable in the fourth because of gangrene of the whole small intestine. Two of our patients are alive and doing well two years after the resection. The third died 25 days after the operation from a complete thrombosis of the portal vein and all its tributaries. Warren and Eberhard had 13 deaths or 34.2 per cent of 38 cases of venous mesenteric thrombosis which were subjected to resection. Berry and Bougas had eight deaths in 13 cases, 10 of the cases having been operated upon.

Early diagnosis is important in the prevention of a higher mortality. Adequate operative treatment during the first twelve hours can result in a very low mortality even with rather extensive resection of the involved gut. If operation is delayed beyond twelve hours the mortality increases rapidly.

Cases

Case One (74) 2-19-54. R.V.P., a 46 year old white man had a subtotal gastric resection in February 1954 for a benign gastric ulcer with an uneventful immediate postoperative course. He went home on the ninth day, but on the 14th day he had mild abdominal discomfort, diarrhea, a temperature

of 100.0 F., and a pulse rate of 106. The following day the symptoms disappeared, and he felt quite well for a few days. Then on the 18th day abdominal pain returned, and he vomited twice. Upon re-admission to the hospital his white cell count was 18,000; temperature, 100.0 F., pulse rate, 120. The abdomen was not tender to pressure. X-ray examination of the abdomen revealed some dilated loops

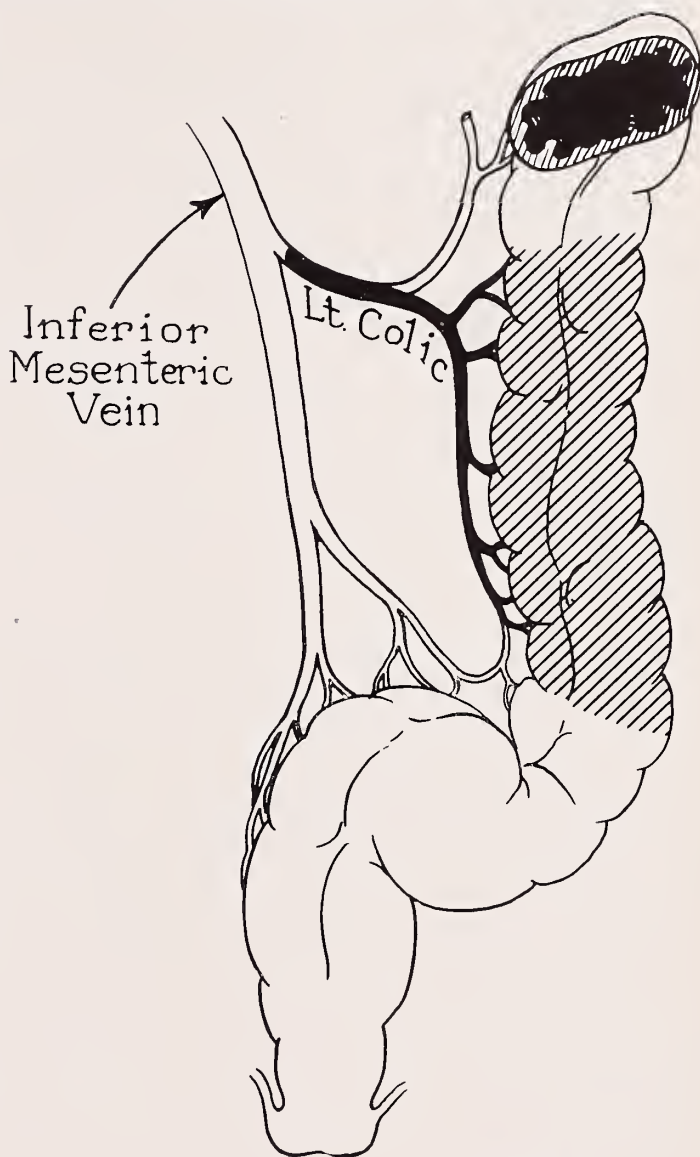


Fig. 4

Figure 4: Illustration showing rare case in which left colon is involved.

of the small bowel. Fluids and achromycin were administered parenterally. During the next 48 hours the abdomen became more distended, and he became more and more severe. Tenderness was found over the entire abdomen, and intra-abdominal abscess was considered. At laparotomy about four liters of serosanguinous fluid were found in the abdomen and aspirated. The entire intestinal tract was distended and hyperemic and about 270 cm. of the lower jejunum and the upper ileum were involved. Arterial pulsations were present in all of the major

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branches of the superior mesenteric artery. An immediate resection of the involved bowel and mesentery was done with end-to-end anastomosis. Anti-coagulants were not used because of the recent gastrectomy and because it was felt that all of the thrombi had been removed. The postoperative course was satisfactory until the eighth day when he developed acute right lower quadrant pain, signs of a spreading peritonitis, and a fall in blood pressure to 70/40. At operation, a generalized peritonitis was found but the source could not be detected. There were semi-necrotic areas on the caecum which may have been due to vascular disturbances. A cecostomy was performed and the abdominal cavity drained. The patient again recovered after a stormy course but developed thrombophlebitis of the right leg about 10 days postoperatively. He was then treated with dicumarol. The phlebitis cleared completely during that time. A fecal fistula healed, and in three months, the patient was able to return to his usual occupation. He has remained well without evidence of symptoms of the so-called "post-intestinal resection syndrome."

Case Two (8304). R.G., a 56 year old white man was admitted December 13, 1953, complaining of severe abdominal pain, which began 12 hours before admission and following a heavy meal. The pain was constant and soon spread over the entire abdomen. There was slight nausea but no vomiting, no diarrhea, constipation, or melena. He gave a history of occasional epigastric pain when the stomach was empty, relieved by milk. The only other positive point in his history was some "kidney trouble" once, with no genito-urinary complaints at this time. Physical examination revealed an acutely ill, well developed and nourished white male, mentally alert and cooperative. Temperature 101.0 F., BP 170/80, and pulse rate 104. There was no abdominal distention but marked rigidity of the entire abdomen with generalized tenderness. Rebound tenderness was also present. No solid organs and no masses could be felt. Upon accumulation, peristalsis was rarely heard. The urine contained a slight trace of albumin and few white cells and an occasional hyaline cast. The Hgb was 13.6 Gm. with an RBC of 4.72 million. The white cell count was 33,650 with 84 per cent polys, 12 per cent stabs, and four per cent lymphos. A flat X-ray film of the abdomen was normal. The preoperative diagnosis was ruptured peptic ulcer. Upon opening the abdomen most of the ascending colon and part of the ileum were found necrotic. By resection 50 cm. of colon and 40 cm. of ileum were removed including the attached mesentery, and an end-to-end anastomosis was done. The

mesenteric veins contained thrombi, and the mesentery was thickened. Postoperatively penicillin and streptomycin were given but no anti-coagulants. He recovered steadily without complications and was discharged on the 22nd day after operation in good condition. The pathological report showed gradual transition from normal to necrotic ileum but there was an abrupt ending of the necrotic process at the colon. The mesentery showed diffuse thickening, a marked inflammatory reaction, and the presence of recent thrombi in the mesenteric veins.

Case Three (7399) 10-19-54. W.F.T., an 84 year old white male admitted October 19th, 1954, for further surgery and plastic repair of the face. During hospitalization he sustained an intertrochanteric fracture. Eleven days after admission hip nail repair was performed, following which he became mentally confused and discontent. Twenty-two days after admission he first complained of substernal pain. An EKG was done but showed no evidence of myocardial infarction. Ten days later he complained of pains and discomfort in his abdomen, and the following day abdominal distention and a questionable acute abdomen were found. Two days later he died. Autopsy revealed venous mesenteric thrombosis with gangrene of large bowel and focal peritonitis as well as malignant lymphoma and adenocarcinoma of the stomach with metastasis to liver, lymph glands, spleen, and kidneys.

Case Four (5825) 873 2-6-53. A.B., a 68 year old white female was admitted with severe abdominal pain of ten days duration. The pain was continuous, and she began passing tarry stools. There was no nausea or vomiting. She had had a cholecystectomy and a panhysterectomy many years ago. For years she had been subject to recurrent attacks of phlebitis, particularly in the lower extremities. On examination, the abdomen was found diffusely tender but not rigid. The urine contained a few red blood cells and pus cells. C.B.C. was normal. Stomach contents contained blood. Roentgenogram showed no air in the abdomen or any other significant findings. For the first two days she appeared to improve somewhat, but four days after admission she was definitely worse. The abdomen was very tender but not distended. Peristalsis was absent. Roentgenograms of the abdomen revealed loops of distended small intestine. A perforated viscus was considered and at operation, on the fourth postadmission day, all of the small intestine was found to be completely gangrenous due to thrombosis of the superior mesenteric vein. There was no indication for intestinal reaction. The patient died twelve hours after the operation and at autopsy a thrombosis of the portal vein and all its

tributaries was found to be the cause of death. The entire small intestine was necrotic.

Case Five (161.014). G.E.L., a 34 year old white female was admitted with severe generalized abdominal pain, which started as a cramping pain in the upper abdomen two weeks before admission. Twenty-four hours before admission the pain became severe with nausea and vomiting but no flatus or bowel movement. Four months before admission she had a splenectomy for hypersplenism. Two months before admission she had a D and C for an incomplete abortion, following which she was not well and gradually developed the present illness. There had been no chills or fever. Thrombosis which had occurred increased markedly postoperatively, and she was treated with anticoagulants. Platelets were constantly above one million due to the splenectomy. On admission she had generalized abdominal tenderness, chiefly in the right lower quadrant. Peristalsis was hypo-active. Fluid was thought to be present in the right lower quadrant. The cervix was freely movable, but there was a bloody cervical discharge. There was tenderness of the right adenexa but no palpable masses. Rectal examination showed tenderness in the right side of the pelvis, without any masses being felt. There was some brown feces. Operation 24 hours after admission revealed an intestinal obstruction secondary to mesenteric thrombosis, and 75 cm. of the gangrenous intestine was removed. At the time of operation it was thought that the patient might have a portal vein thrombosis. Postoperatively, she continued to have anorexia and developed ascites and ileus. The tenth postoperative day, her pulse was 140 and her temperature below normal. The abdomen was tense, and there was much ascitic fluid. On paracentesis, 3500cc. of slightly cloudy fluid were removed with some relief of pain. She grew continually worse, and died quietly on the 13th postoperative day. Autopsy revealed generalized peritonitis with partial necrosis of the entire small and large intestines and thrombosis of the portal vein and its tributaries.

Treatment

The treatment of venous mesenteric thrombosis is early resection of the involved intestinal segment, together with at least six to 12 inches of the proximal and distal gut, and of the thrombosed mesentery with a margin of healthy mesentery in order to be certain that the excision has extended well beyond the limits of the spreading thrombosis.

Haymond ¹³ who analyzed 257 collected cases of extensive or massive resection of the small intestine stated that a patient can tolerate a resection of 33 per cent of the length of the small intestine. However, cases have been reported in which all of the

small intestine was resected with complete or almost complete recovery.

Instances of spontaneous cure have been reported but according to Musgrove and Morlock ¹⁴, only 13 cases had been reported in the literature up to 1948. We do not know how many of these cases represent the venous type, but in all cases in which exploratory laparotomy was done, mesenteric vascular occlusion was found, and the abdomen was closed without further surgical interference.

Our experience with this abdominal catastrophe is very small, but it suggests that early resection

TABLE 7

CASES	TIME OF ONSET P.T.A.	DIAGNOSIS	TIME OF OPERATION		FINDINGS AT OPERATION	TYPE OF OPERATION	COMPLICATION	RESULT	AUTOPST
			After Onset	After Admission					
74	4 Days	Mesenteric Thrombosis (?) intra-abdominal abscess	7 days	60 hours	Gangrene at 275 cm of the lower jejunum and upper ileum	Resection. End to end anastomosis	Peritonitis 8th p.o.day. Appendectomy and cecostomy same day. Thrombophlebitis 10th P.O. of the right leg	Good	
8304	12 Hrs.	Ruptured Peptic Ulcer	18 hrs.	6 hours	40 cm of ileum and 50 cm of colon	Resection. End to end anastomosis	None	Good	
7399	During hospitalization Silent onset	None	None	None				Died	Thrombosis of superior mesenteric vein
873	10 Days	Perforated Viscus	14 days	4 days	Complete Gangrene of entire small intestines Peritonitis	Exploratory Laparotomy		Died	Thrombosis of portal vein and its tributaries
161014	Several months	Mesenteric Thrombosis	Several months	24 hours	74 cm of small intestines	Resection. End to end anastomosis		Died	Thrombosis of portal vein and tributaries

Table 7: Summary of the records in our five cases.

offers the greatest hope. The use of anticoagulants help, but we do not believe that it is the final solution. Some authors report the use of heparin and dicumarol postoperatively but although their use may be helpful, the effect obtained by the use of anticoagulants is as yet inconclusive, and further study of their effects is required.

Table 7 gives a brief summary of our five cases of venous mesenteric thrombosis. The first two

TABLE 8

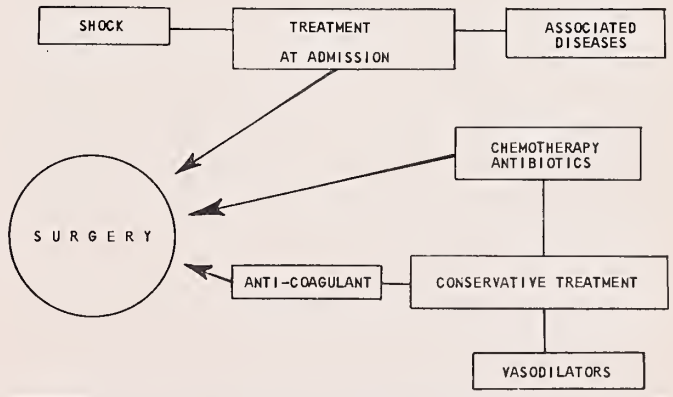


Table 8: The treatment of mesenteric thrombosis.

cases are examples of the good results which are possible with early recognition and surgery. (See Table 8)

Summary

In the eight years from 1947 to 1955, there were 146,106 admissions to two general hospitals in the

MESENTERIC THROMBOSIS / Skandalakis

Atlanta area not including obstetrical patients, and of these, 62,103 were surgical patients. Seventeen (0.0117 per cent) of the general admissions and 0.27 per cent of the surgical admissions were diagnosed as mesenteric vascular occlusion but only at operation or in autopsy specimens. Of these 17 cases, 12 represented the arterial type (0.0082 per cent for the general admissions and 0.019 per cent for the surgical), and five represented the venous type of mesenteric vascular occlusion (0.0034 per cent for the general admissions and 0.008 per cent for the surgical).

In our cases, 41.7 per cent represent the venous type. There were three males and two females, ranging from 34 to 84 years of age. The possible etiological factors, clinical picture, pathology, and diagnosis of venous mesenteric thrombosis are discussed. The importance of early diagnosis and early operation is stressed as a life-saving procedure. In this report, two cases were successfully treated because of early recognition and early massive resection of the involved intestinal segments.

1968 Peachtree Rd., N.W.

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SIMONTON IS GP OF THE YEAR; CALLAWAY RECEIVES HARDMAN AWARD

FRED H. SIMONTON, Chickamauga, was selected "General Practitioner of the Year" at the *104th Annual Session of the Medical Association of Georgia held in Macon, April 27-30.

A native of Heard County, Dr. Simonton received his education at A&M School, Carrollton, the University of Georgia, and the Medical College of Georgia, Augusta. He interned at the Macon Hospital and later served his residency there. Dr. Simonton has been in the private practice of medicine in Chickamauga since 1933.

Long an active member of both the GAGP and the AAGP, Dr. Simonton is the Immediate Past Vice President of the American Academy. He has been a Georgia Delegate to the AAGP; a member of the Board of Directors and of the Executive Committee of the American Academy.

In his own state, Dr. Simonton was formerly chairman of the Georgia State Board of Health. He is at present Vice Speaker of the House of Delegates and is President of the Georgia Academy of General Practice. He has been president of the Walker, Dade, and Catoosa Counties Medical Society, Presi-

dent of the Seventh District Medical Society; and he is a Past Vice President of the Medical Association of Georgia.

Also at the session, members of the Medical Association named ENOCH CALLAWAY of LaGrange recipient of the Hardman Award for distinguished service to the medical profession.

A native of La Grange, Dr. Callaway attended Tulane University where he received his medical degree. He served his internship at Natchez Mississippi State Charity Hospital and later did post graduate work at Emory University and New York Skin and Cancer Hospital, New York City.

At present Dr. Callaway is active in cancer research in LaGrange. He is a member of the board of the American Cancer Society, Georgia Division and in 1951 received the American Cancer Society Medal for his contribution to the control of cancer. Dr. Callaway is a former president of the Medical Association of Georgia.

The Hardman Award is named after the late Lamartine Hardman, physician-governor of Georgia.

BROMIDE INTOXICATION

J. K. McDONALD, M.D. and W. E. BARRON, JR., M.D., *Augusta, Georgia*

MANY ARTICLES HAVE appeared on bromide intoxication in both past and recent literature. Despite the attention given to it and the attempts made to educate the public and the medical profession about the dangers of bromide intoxication, the admission rate to general and psychiatric hospitals of cases of bromism has remained high. Doctors have continued to prescribe bromides without adequate warning to and supervision of the patient, and the sale of patent medications containing bromides has remained high. A reiteration of the dangers of bromides, a review of its pharmacology, the diagnosis and treatment of bromism, and the presentation of three recent typical cases from the records of the University Hospital, Augusta, Georgia, will be the goals of this discussion.

Cases

During the five year period from August, 1952, to August, 1957, there were twenty cases of bromide intoxication admitted to the University Hospital. Most of these cases were admitted for observation with the following diagnoses: alcoholism, delirium tremens, cerebral thrombosis, brain tumor, depression, schizophrenia, neurosis, drug intoxication, and toxic eczema, only to have bromism proven several hours after admission by the obtaining of blood bromide levels. The above diagnoses emphasize the multiplicity of symptoms that bromides may cause.

Of the twenty cases, thirteen were female and seven were male. There were only two cases in Negroes. The average age was forty-eight years.

The three cases presented are the most recent and typify the ways bromism may present itself.

Case One. U. S., a 49 year old white male with a long history of alcoholism and inactive pulmonary tuberculosis was brought into the emergency room by the police. He had staggered into police headquarters some sixteen hours earlier, and when he did not become sober he was brought to the emergency room. There was no member of his family with him and police were unable to give any other history.

Physical examination revealed a stuporous,

lethargic, middle-age white male who was able to mutter incoherently. No odor of alcohol was detected. Blood pressure was 130/70, pulse 104, regular. Respiration 22, temperature 98 rectally. There was noted to be no evidence of trauma over the head or body. Pupils were round and equal. Fundoscopic was not remarkable. The lungs were clear to percussion and auscultation. The heart and abdomen were not remarkable, neurological examination revealed hypoactive reflexes bilaterally. No Babinski or other pathological reflex was elicited.

Blood work and urinalysis included CO₂ blood sugar, and N.P.N. were within normal limits.

He was admitted for observation. The next morning his wife was contacted and she reported that her husband had fallen several days previously and hurt his back. He consulted his local physician who gave him liquid medication to "calm his nerves." A serum bromide was ordered and reported as 300+ mgm. per cent.

He was started on a vigorous therapeutic regimen utilizing ammonium chloride, sodium chloride, mercurial diuretics, and nicotinic acid. He was alert three days later but had developed a definite paranoid psychosis with delusions and hallucinations. Therapy was continued and at the end of a week he was rational. Further diagnostic work revealed a compression fracture of the third lumbar vertebra.

Case Two. Mrs. E. W., a thirty-six year old white female was admitted in a frank paranoid state with hallucinations, delusions and slurred, incoherent speech. Her daughter who brought her to the hospital stated that the patient had been extremely nervous for two weeks and had consulted her local physician who prescribed a liquid "nerve medicine." The patient had taken fourteen ounces of this liquid in the past two days.

Physical examination was essentially normal.

Bromide level on admission 300+ mgm. per cent.

Treatment was begun using the same regimen as above. She responded well to treatment and was discharged eight days after admission to be followed in the out-patient department.

Case Three. F. S., a forty-four year old white housewife who had been "nervous" for years bought a bottle of patent medicine several weeks

BROMIDE INTOXICATION / McDonald

prior to admission. At the time of admission the patient was presented with signs and symptoms compatible with a diagnosis of agitated depression. She was hospitalized.

Physical examination was not remarkable.

Blood bromide level was 150 mgm. per cent.

The patient was treated with a high intake of sodium chloride over a three day period with moderate improvement. Blood bromide had dropped below 50 mgm. per cent. A moderate depression remained, however, which was treated with a course of E.C.T.

In case one several things are of importance. Here a diagnosis of bromism is not readily apparent. The fact that coma associated with bromide intoxication is rare demonstrates in this case the necessity of having a high index of suspicion for this condition. As an aide in the diagnosis of bromism, some hospitals obtain routine blood bromide levels on every psychiatric admission. While this might be ideal, practicality interdicts this. However, a blood bromide on every newly diagnosed case of schizophrenia and every case of delirium not readily attributed to some other cause would certainly help in the diagnosis of bromism.⁶

In case two we find that the medication was again prescribed by an M.D. Here, however, the diagnosis was suspected early with the aid of history from relatives.

In case three the medication was purchased without a prescription by the patient. While the patient was neurotic, it can be assumed that bromides played some part in her admission to a hospital. The detection of bromides in cases such as this is an important aid for the evaluation of therapy and for warning the patient about the future use of bromides.

All of the above cases responded promptly to treatment. The two cases with the high levels were treated vigorously and the case with the low level was treated only with salt intake supplements and withdrawal of the drug. The prompt response with favorable results is the usual but not the only course the disease may follow. As with any case of delirium with excitement, a coronary occlusion or pneumonia may add complications. Another possibility is that a latent schizophrenia may be precipitated by the bromides and mean many months or years of incapacitation. In one series of thirty-four cases three deaths were reported.⁵

Pharmacology

Bromine is a halogen as is chlorine, fluorine, and iodine. Bromides are distributed in the body in the same manner as are chlorides. Bromides replace chlorides, the sum of bromides and chlorides remaining constant. Bromides are absorbed rapidly from

the gastro-intestinal tract and are mostly extracellular.²

They are excreted by the kidney and small amounts are found in the tears, saliva, sweat, and milk. Some authorities believe that chlorides and bromides are handled in a like manner by the kidney. Others feel that the bromides are reabsorbed in greater amounts by the tubules than are chlorides. About 97 to 99 per cent of the chlorides are reabsorbed normally. One can readily see that even if the bromides are handled identically like the chlorides, some length of time would be involved in the complete excretion of bromides. It is further known that the bromide ratio to chloride in the urine remains about equal to that of the ratio in the plasma. It follows, therefore, that if one raises the chloride excretion by the kidney with such agents as mercurials or by increased chloride intake that one concomitantly raises the bromide excretion. It also follows that the administration of bromides without a knowledge of the chloride intake or a knowledge of the extrarenal loss of chloride as in sweating is the equivalent to administering an unknown amount of bromides.^{1,4}

A study by Harris and Devion demonstrated certain similarities between pellagra and bromism. By acting on this and using nicotinic acid as a therapeutic agent in bromism they demonstrated the efficacy of its use. It was postulated that bromides interfere with coenzymes I and II and that nicotinic acid counteracts this inhibition.³

Bromides act as a central nervous system depressant. Symptom range from dullness, lethargy, and anorexia to full blown toxic delirium with disorientation, hallucinations and delusions, on to stupor and coma. Neurological changes occur. Tremors and variations in deep tendon reflexes are found along with ataxia and slurred speech. Abnormal electroencephalograms are found in 88 per cent of people with levels over 100 mgm per cent.

In general, blood bromide levels of 75 to 125 mgm. per cent are considered therapeutic as in the treatment of epilepsy. Levels of 100 to 200 mgm. per cent may produce symptoms. Levels above 200 mgm. per cent are the cause of mental symptoms until proven otherwise. The toxic level varies from person to person. Arteriosclerosis, alcoholism and other factors alter the effect of bromides. Levels as low as 75 mgm. per cent may be productive of symptoms in some people.

Treatment

A good rule to follow is to treat cases with levels above 75 mgm. per cent actively and to continue treatment until the level is below 50 mgm. per cent.

Treatment is aimed at lowering the blood bromide level rapidly and controlling the symptoms until they

abate with lower blood bromide levels. The principles mentioned above are used to effect this lowering.

Increase in chloride and ammonium chloride gram one q.i.d. intake is accomplished by giving sodium chloride Gm. one q.i.d., p.o. More chloride is given in the form of 1,000 c.c. five per cent glucose in N/S with 100 c.c. five per cent saline I.V. daily X 5, remembering the usual contraindications to high salt intake. Fluid intake is kept high enough to maintain urine output around 3,000 c.c. daily. Further intravenous therapy or tube feeding may be necessary to accomplish this early in the treatment. Vitamins are added to I.V. fluids, particularly "B" vitamins, and specifically 800 mgm. of nicotinic acid daily. Mercurial diuretics such as mercuhydrin (2 c.c. I.M. daily) are used. Patients frequently require sedation and for this Sparine (50-100 mgm. I.M. q 2-4 hours p.r.n.) is used. The patients should be kept in restraints until their delirium has subsided for 36 hours. Careful nursing care is a necessity. Without it, and frequently with it, complications such as pneumonia must be treated as they arise. Blood bromides are obtained every third day and therapy is discontinued after a fall below 50 mgm. per cent has been secured.

An important point to remember in treatment is that only a sick person takes bromides. The treatment of the sickness that led to the use of bromides is perhaps the most important part of the therapeutic program. With clearing of the bromide intoxication

one may be left with anything from a mildly neurotic menopausal female to a raving schizophrenic, either of which demand further care.

Summary

- 1. Bromide intoxication is a frequently encountered condition.
- 2. Three cases of bromism are presented.
- 3. In order to diagnose the condition a high index of suspicion must be maintained and frequent blood bromide levels obtained.
- 4. Therapy includes high salt intake, nicotinic acid, and mercurial diuretics and is based on a knowledge of the pharmacology of the bromides as well as empirical data.
- 5. The treatment of the sickness that led to the use of bromides is as important as the treatment of the bromism.

3525 Northview Avenue

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NEW MEMBERS of the MAG

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Ernest Foss Adams	Georgia Warm Springs Foundation, Warm Springs	Active	Meriwether-Harris
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Ada Teresa Colley	520 Pine Avenue, Albany	Active	Dougherty
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HAZARDS OF STEROID THERAPY IN THE SURGICAL PATIENT

Six cases are reported in which these hazards are illustrated

ROBERT M. COFFEY, *Washington, D. C.*

THE AXIOM THAT the use of each new therapeutic agent carries with it certain undesirable features applies most emphatically to the use of cortisone and ACTH. While continued employment of these steroids together with the introduction of their improved forms has demonstrated many new therapeutic applications, it is also true that additional dangers and contraindications have become clinically evident.

It is not the purpose of this report to decry the tremendous value of steroid therapy. A number of individuals are living today as a result of the availability of cortisone who would otherwise have expired. This is well illustrated by the following case:

Case One. Mrs. M. B., age 22, was admitted to Georgetown University Hospital on 1-7-54 because of obesity, amenorrhea, hirsutism and mild psychotic symptoms of 18 months duration. Physical examination revealed typical findings of Cushing's syndrome (Figure 1), a diagnosis confirmed by studies of the 17 keto- and 11-oxysteroids.

Surgical exploration on 2-11-54 carried out through a bilateral lumbar approach revealed bilateral hyperplasia of the adrenals. A total left and subtotal right adrenalectomy, preserving approximately one-twentieth of the right adrenal gland, was carried out (Figure 2).

Cortisone therapy was continued during her postoperative period and attempts to withdraw it were associated with the development of clinical signs of adrenocortical insufficiency. Nine months postoperatively evidences of Cushing's syndrome had completely disappeared (Figure 3).

It is obvious that this patient is completely dependent on cortisone, and substitution therapy will of course be required for the duration of her life.

While there are a number of clear-cut indications for steroid therapy, these drugs are being employed in a wide range of conditions where their use is of doubtful or questionable merit. For this reason,

surgeons and anesthesiologists will undoubtedly be confronted with an increasing number of cases where steroid therapy has been or is being employed, and each of these individuals poses a serious problem. The problem presents itself in one of two ways, namely: (1) the individual in whom cortisone or ACTH is introduced before or continued through surgical treatment, and (2) the individual in whom the therapy has been discontinued a variable time preoperatively.

The Problem of Continued Steroid Therapy

In the individual who is receiving steroid therapy at the time of an operative procedure, certain undesirable side effects may be anticipated:

(1) *The retention of sodium chloride and water and the loss of potassium:* apart from the undesirable electrolytic and fluid imbalance resulting from this influence, the development of edema at the site of anastomoses poses a serious problem in gastrointestinal surgery.

(2) *Increase in pepsin and pepsinogen:* this ulcerogenic influence can lead to serious complications as illustrated by the following case.

Case Two. G. F., 62 year old white male, presented a history of refractory anemia of four years duration. Corticosteroid therapy had been employed intermittently for two and one-half years, and because of the moderately satisfactory response to this treatment, splenectomy was carried out at Georgetown University Hospital on 1-4-55. Steroid therapy had been continued pre- and postoperatively. On the fourth postoperative day massive hematemesis occurred. Steroid therapy was discontinued, and the bleeding ceased in twelve hours. On the sixth postoperative day a second attack of massive hematemesis occurred, requiring gastric resection for a large gastric ulcer on the lesser curvature, which was demonstrated to be the site of hemorrhage.

(3) *Nitrogen loss, and an inhibitory influence on*

the proliferation of fibroblasts: while the present evidence indicates that the use of steroids in moderation does not seriously hinder wound healing, there is experimental evidence that large amounts of steroids do definitely interfere with the secure healing of tissues. Subsequent events in case two were impressive in this regard.

Case Two (continued). During this uneventful postoperative course cortisone 100 mgm. b.i.d. was reintroduced. On the eighth day after the gastric resection a dehiscence of the upper midline incision occurred. At the time of repair of the dehiscence under general anesthesia an attempt to visualize the anterior gastrojejunal anastomosis was made. On gentle retraction of the afferent and efferent loops of jejunum with an abdominal laparotomy pad the anterior wall of the anastomosis was seen to separate as one would expect wet blotter paper to. After repair of the anterior layer of the anastomosis with interrupted silk sutures, the abdominal wound was approximated with through-and-through wire sutures. During the ensuing three days evidence of peritonitis developed and the patient expired four days postoperatively.

While it is not possible to prove the relationship of either the wound dehiscence or the disruption of the gastro-enteric anastomosis to the effect of cortisone, there is no doubt in the mind of the author that the status of healing of the gastrojejunostomy on the eighth postoperative day was decidedly abnormal.

(5) *Euphoria:* the production of a euphoric state in a preoperative case may lead the surgeon and anesthesiologist into a false state of optimism, as illustrated by the following case.

Case Three. N. H., 30 year old white female, was admitted to Georgetown University Hospital

5-11-56, presenting a history of chronic ulcerative colitis of three years duration. In June, 1954, an ileostomy had been performed for treatment of an acute exacerbation of this disease. At the time of admission, because of her febrile course, ACTH therapy was introduced. After two weeks it was discontinued because of the development of mild Cushingoid features. However, the patient, who had previously been depressed and appeared chronically ill, developed a sense of well-being and euphoria, and was impatient for the anticipated total colectomy to be carried out. Cortisone therapy was introduced on 6-4-56 and on the following day a total colectomy was performed uneventfully. Eight hours postoperatively severe shock developed and in spite of the introduction of hydrocortisone and a vasopressor, the patient expired.

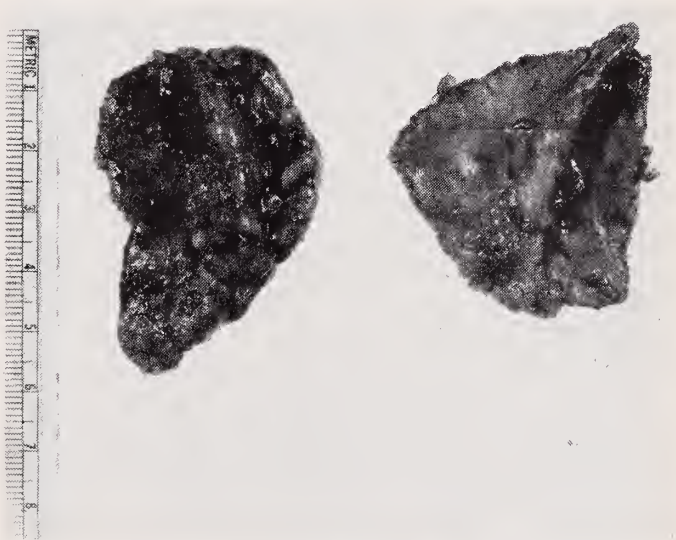


Figure 2: Case 1, total left and subtotal right adrenalectomy.

A decision to carry out a total instead of a subtotal colectomy in this case was based to some degree



Figure 1: Case 1, preoperative.



Figure 3: Case 1, nine months postoperatively.

STEROID THERAPY / Coffey

on the apparent optimal status of the patient preoperatively, which in retrospect was more euphoria than fact.

(6) *Prevention of localization of infection by decreasing inflammatory response:* the obvious contraindications to the use of steroids in tuberculosis and infections of unknown etiology is evident.

The Problem in Previous Steroid Therapy

There is abundant clinical evidence at the present time that steroid therapy once discontinued results in adrenocortical insufficiency as a result of decreased secretion of endogenous corticotropin by the anterior pituitary. It has been demonstrated clearly that the weight of the adrenal glands in individuals receiving cortisone is less than that of a control group with similar disease. Salassa et al¹ have reported cases in which both a decrease in the size of the adrenal glands as well as a loss of vacuoles and diminished lipid on histologic study of the adrenal cortex was observed. The mechanism of production of this adrenocortical insufficiency is essentially the same as occurs after surgical removal of a functional adrenocortical tumor.

Case Four. Mrs. B. C., white female, age 26, was admitted to Georgetown University Hospital on 7-22-51 with a diagnosis of Cushing's syndrome. In the previous year she had developed hirsutism,

amenorrhea, obesity and acne. Physical examination revealed typical features of Cushing's syndrome (Figure 4).

On surgical exploration carried out 8-2-51 a tumor, measuring 6 x 5 cm., had replaced the left adrenal gland (Figure 5). Steroid therapy, including cortisone and ACTH, was continued postoperatively for a period of approximately three



Figure 5: Tumor, left adrenal gland.

weeks. However, two weeks later evidence of adrenocortical insufficiency developed requiring resumption of cortisone. Six months later all evidence of Cushing's syndrome had disappeared (Figure 6).



Figure 4: Case 4, preoperative.



Figure 6: Case 4, six months postoperative.

The excessive amounts of corticosteroids produced by this functional tumor depressed corticotropin production with functional atrophy of the opposite adrenal.

While it is not clearly understood at the present time how long a period of time is required for spontaneous resumption of normal adrenocortical activity following steroid therapy, there is clinical evidence that the stress of anesthesia and surgery may precipitate adrenocortical insufficiency as long as six months after the steroid therapy has been discontinued, and in those cases in which hypercortisonism has developed, this period may be considerably increased. The studies of Abbott et al² indicate that the greatest weight loss of the adrenal occurs in those patients who have received cortisone over one week and in whom it has been discontinued within twenty days of surgery. The clinical picture of adrenocortical insufficiency includes (1) gastrointestinal symptoms, consisting of anorexia, nausea, vomiting, abdominal pain, and diarrhea; (2) circulatory collapse, with feeble pulse, hypotension and cold, cyanotic extremities; (3) hyperpyrexia; (4) apathy, stupor, delirium, and eventually coma; and (5) laboratory findings including hyponatremia, hemoconcentration, elevated blood urea, and hypoglycemia.

Treatment

Anticipation of the untoward influences of steroid therapy will permit the introduction of measures that prevent untoward incidents. However, emergency measures must be employed in other instances, while in the patient who is currently receiving treatment, reinforcement of steroid therapy must be employed.

Preventative Treatment: It goes without saying that at the present time a careful inquiry into previous steroid therapy must be made by both the surgeon and anesthesiologist in every case in whom surgery is contemplated. Failure to acquire this information and to institute adequate measures can lead to unexpected and sometimes fatal developments.

Case Five. Mrs. E. B., 57 year old white female was admitted to Georgetown University Hospital 3-22-56 for a resection of a carcinoma of the sigmoid. On 12-10-55 a transverse colostomy had been carried out for a perforated lesion of the sigmoid associated with pelvic peritonitis. At that time cortisone therapy had been introduced and continued for ten days because of a postoperative chronic shock state at which time an inadequate eosinophil response was noted.

On 2-4-56 she was readmitted for surgical exploration of a palpable right upper quadrant mass. No steroid therapy was employed preoperatively and at the time of laparotomy on 2-5-56 the mass

proved to be a large omental abscess which was easily excised. Her postoperative convalescence was uneventful. On 3-26-56 sigmoidoscopy revealed the presence of an adenocarcinoma at 22 cm. In spite of an inadequate eosinophil response to a small dose of corticotropin and probably because she had uneventfully undergone an operative procedure on 2-5-56, a resection of the sigmoid with end-to-end anastomosis was carried out on 3-37-56 without preoperative steroid therapy.

Twelve hours later profound shock with other evidence of adrenocortical insufficiency appeared, and in spite of intensive hydrocortisone therapy, she expired. At autopsy histologic evidence of adrenocortical depletion was evident.

Selection of those cases in whom adrenocortical insufficiency may be provoked by anesthesia and surgery cannot at the present time be accurately carried out. The use of the Throne eosinophil response to a small dose of corticotropin has shown no correlation to the manner that an individual will stand the shock of an operative procedure.³ Measurement of urinary corticosteroids after similar stimulation is too time-consuming and technically difficult to be of practical value. For this reason it is strongly recommended that preventative measures be instituted in every patient in whom the steroid therapy has been discontinued within a period of six months prior to the anticipated surgical procedure, and in those who had developed signs of hypercortisonism in whom the therapy was discontinued within a year of anticipated surgery. In such cases we employ the following program:

- (1) Hydrocortisone 100 mgm. b.i.d. 48 hours before surgery
Hydrocortisone 100 mgm. b.i.d. 24 hours before surgery
Hydrocortisone 100 mgm. 1-2 hours before surgery
Hydrocortisone 100 mgm. on the first postoperative day
Hydrocortisone 75 mgm. on the second postoperative day
Hydrocortisone 50 mgm. on the third postoperative day
Hydrocortisone 25 mgm. on the fourth postoperative day.
- (2) Careful and limited use of morphine.
- (3) Avoidance of glucose and water without saline.

Emergency Treatment: In the event that evidence of adrenocortical insufficiency develops during or shortly after an operative procedure in the case in whom the employment of prophylactic measures was inadvertently or knowingly omitted, the introduction of emergency therapy may be life-saving.

Case Six. M. F., colored female, age 52, was admitted to Georgetown University Hospital on 2-8-57 because of an abscess of the palm of the

left hand. Examination revealed the presence of a semifluctuant area, measuring 4 x 3 cm., in the palm of the left hand with lymphangitis of the forearm. After instituting adequate antibiotic therapy, incision and drainage of the abscess was carried out under general anesthesia. In spite of a relatively brief operative procedure carried out under light anesthesia, postoperative hypotension developed together with other evidences of mild adrenocortical insufficiency. This was controlled by the administration of several ampules of Solu-Cortef. It was only after the recovery of the patient postoperatively that it was determined that she had been receiving metacortin therapy for rheumatoid arthritis which had been discontinued one week preoperatively.

Measures to be introduced immediately on the development of signs of adrenocortical insufficiency are: (1) Solu-Cortef, 1-3 ampules intravenously, (2) Adrenal cortex extract, 50-100 cc. intravenously, (3) 1500-4000 cc. of normal saline solution intravenously, (4) supplemental injection of cortisone or hydrocortisone 25-50 mgm. 24h., (5)

neosynephrine, (6) whole blood, (7) no narcotics.

Reinforced Treatment

In the case of the individual in whom steroid therapy has been continued up to or introduced shortly before the time of an operative procedure, increase in the amount of steroids for 24 to 48 hours preoperatively with gradual reversion to the preoperative dosage on the third or fourth postoperative day is recommended. This reinforcement is employed in anticipation of the increased adrenocortical requirements as a result of the stress of anesthesia and surgery.

1150 Connecticut Avenue

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RECESSION INFLUENCES MEDICAL LEGISLATION

THE RECESSION CONTINUES to influence the course of much legislation. Even in the health fields, bills that promise in one way or another to alleviate unemployment appear to have priority. At the same time, federal departments are favoring construction grants to projects that can be started without much delay.

In legislation, here are some of the developments:

1. Liberalizations in unemployment compensation and in social security are receiving constant attention on Capitol Hill. The bill to extend the period of unemployment compensation payments is making progress. There is the possibility also that it will make participation mandatory for all employers.

Prominent among proposed changes in the social security program itself is the Forand bill for free hospitalization and in-hospital medical care and surgery for persons entitled to social security benefits. It is being pushed by the AFL-CIO and by some liberal Democrats, and opposed by the American Medical Association and a growing group of other organizations. The opposition is convinced that the Forand bill is unnecessary, that it would be far more costly than anticipated, and that it would point the way to a broad national medical care plan for all persons covered by social security.

2. A controversial bill to vastly increase money available for grants for community facilities—waste plants, hospitals, state medical schools included—is active in Congress. One proposal is to vote a billion dollars, to

be lent (at about 3½ per cent interest for 50 years) to communities. The objective here, as in many other measures, is to put people to work on construction projects.

Federal agencies have evolved a number of schemes to get U. S. dollars into circulation faster and are attempting to work out others. In each case described below, no additional appropriation is involved; money is shifted from a project that is getting a slow start to one that is about ready to begin construction. Also, all totals given represent amounts to be spent by the sponsors as well as the federal government. Here are arrangements already made:

1. In January, the Hill-Burton hospital construction program called for U. S. grants to start buildings valued at \$381 million; this figure has been stepped up to \$405 million by July 1.

2. Between January and July 1, the original plan was to allocate enough money to start \$120 million in construction for health research plants. This has been increased to \$182 million.

3. Before the recession became so prominent an issue, the plan was to grant enough U. S. money to start construction of \$170 million in sewage plants. Under pressure, the total has been increased to \$215 million.

In most cases, when a project is delayed and thus loses its allocations, the grant is re-scheduled for next fiscal year.

TWENTY FIVE YEARS OF PEDIATRICS IN GEORGIA

W. L. FUNKHOUSER, *Atlanta, Georgia*

TODAY'S MEETING MARKS the Twenty-Fifth Assembly of the Scientific Session of the Georgia Pediatric Society. The father of the state pediatric societies in the South was William A. Mulherin of Augusta. His rallying cry was "Better Pediatrics for the Children of the South." Unquestionably Dr. Mulherin was the driving force in the promotion and organization of the Georgia Pediatric Society, the first meeting of which occurred in 1919. Fourteen were in attendance at this meeting, over which Dr. L. B. Clark presided. There has been no interruption of our annual business meetings.

The perusal of the minutes giving the early history and activities of our society is well worth reviewing.

In 1922 a resolution was passed to cooperate with the public health agencies to institute measures to increase maternal nursing, and to encourage the administration of toxin-antitoxin to prevent diphtheria. In 1926 there was a state-wide publicity campaign on diphtheria prevention combining the efforts of the County Medical Society, the State Department of Health, the Parent-Teacher Association, and every newspaper in the state. In 1933 a committee was appointed to institute lectures to educate the laity on the problems of child care; another to develop courses for doctors; and another to stress the presentation of scientific papers before medical groups on pediatric problems.

It was in the year 1933 that the fall scientific meetings were started. The attendance at the first meeting was forty-eight members and twenty-two visitors. Our guest speakers were Arthur Abt, Horton Casparis, and C. H. Kerley. To review the speakers who have appeared before us during the last twenty-five years is like reading "Who's Who" in Pediatrics. I doubt if any society has ever had such an array of outstanding personnel. Their talents and inspiration have added much to increase our knowledge and have inspired us to reach a high standard of pediatric practice in Georgia.

When asked if I would review the progress

peditrics has made in Georgia during twenty-five years I was most happy to think back and to review my personal experiences and observations; also to chronicle some of the advances and changes that have taken place and to call to your attention procedures that have been inaugurated to make more efficient our service to the young whose welfare is our responsibility.

Indeed my thoughts went back twice twenty-five years. You young men and women, more or less recent graduates, think twenty-five years is a long, long time; but I, as the oldest member of this society, who can speak with a professional span of over fifty years, can assure you that it will not be as long as you think before you, too, can review the twenty-five or fifty years of accomplishments in the pediatric field.

I feel that I have passed through five evolutionary phases of medicine. There, of course, has been no definitive line of demarcation. As a medical student I was impressed with the idea that the object of the doctor was to relieve human suffering, physical and mental; that is the first, symptomatic medicine. Naturally a desire was accentuated to know the cause of the disability. This resulted in the development of procedures for recognizing the pathology, which would explain the objective and subjective symptoms: namely, secondly, diagnostic medicine. The corollary to the symptomatic and diagnostic phases is, how could the pathological findings causing the symptoms be prevented, not only for the benefit of the patient under study, but for the benefit of everyone? This was the third or preventive approach to medicine. The situation that gave preventive medicine such a boost was the information that of the recruits rejected for military service in World War I the majority of the disabilities could have been prevented. Also, after the war the feeding of the European children under Herbert Hoover developed an interest in nutrition and feeding throughout the world and put emphasis on prevention of nutritional disturbances and deficiency diseases. It was at this period that baby health

Presented at the Annual Scientific Meeting of the Georgia Pediatric Society, Atlanta, Georgia, October 31, 1957.

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clinics were inaugurated and that the public and private health organizations entered the field of medicine.

While medicine today has not neglected the comfort of the patient or failed to utilize both old and new methods of arriving at an accurate diagnosis, or failed to instruct in the physical and emotional care, we are stressing at this time the fourth phase, research. It is in this field that great strides have been made and will so continue for many years to come.

This brings me to my fifth impression in the evolutionary progress of medicine; namely, group or team approach to medical and surgical problems. In many clinics today which were instituted primarily to meet a specialized branch of medicine, the pediatrician is more or less tolerated and will be until by our interest and ability to co-operate we earn our just position. The co-ordination of allied activities seems to me to be developing the fifth phase of medical progress, group study and treatment. Extensive technical procedures have been developed necessitating special training to correlate medical, surgical, and technical knowledge. This will be a great impetus to medical progress.

Pediatrics has played its part, especially after its final recognition as a definite and independent branch of medicine. It was a long time coming into its own. In 1919 when I headed the pediatric service at Emory and Grady, we were under the department of medicine. I was associate professor of medicine. It took, blood, sweat, and tears to separate the pediatric department from the medical. It took labor pains to finally more or less divorce the pediatric ward from the surgeon, promoting the surgeon to consultant.

To adequately cover this assignment would require many sessions. Each of you, however, is well acquainted with the progress that has been made, and has accepted as routine those procedures which to me are miracles. All that I can hope to do is to correlate some of the progress pediatrics has made in the twenty-five year span, 1932-1957.

An index to the progress in pediatrics may be measured by the growth of the personnel. The Academy of Pediatrics was founded in 1930; in 1932 there were three hundred members. Today there are over five thousand fellows. There are sixty-eight members of our society who are members of the Academy. The American Board of Pediatrics was inaugurated in 1933. The Society for Pediatric Research was just three years old. The attendance today is a contrast to our initial clinical meeting. Two pediatric journals have made their appearance

during the interval; *The Journal of Pediatrics* and *Pediatrics*. There have been new editions of Nelson, Holt, Brenaman, and the *Year Book of Pediatrics*. These publications with those already in existence have kept us abreast of the rapidly developing progress in pediatrics. We are now enjoying the privilege of better equipped hospitals, with more beds available for children. With the increase in pediatric admissions to the hospitals we are able to secure better trained personnel for interns and residents. With the increased recognition by the universities of the importance of pediatric training, the budgets for both teaching institutions, Georgia and Emory, have been increased. At Emory, since I was chairman, the allotment has risen from zero to enough to warrant full term personnel.

We have experienced a marked decrease in morbidity and mortality in many diseases, and some diseases have been practically eliminated. When a medical student, I attended the meeting of the Baltimore Medical Society. William Osler was present. In discussing a case he remarked, "If we know syphilis and typhoid fever, the balance of medicine would be added unto us." These two diseases do not have the same scientific significance today. In fact there were no deaths in Georgia from typhoid fever in 1956. Pellagra, scurvy, rickets, malaria, and small pox have practically been eliminated. The death rate from whooping cough in 1935 was 4.9 per 100,000 deaths; in 1956, 0.9. In the same period the death rate from diphtheria dropped from 5.3 to 0.2. Typhoid fever dropped from 8.5 to 0. The dysentery group dropped from 28.3 to 5.5. While the drop in the dysentery group is significant it should show further reduction.

During the last twenty-five years many conditions not formerly recognized have been described and evaluated; others studied, adding much valuable information: namely, histoplasmosis, retro-lental fibroplasia, toxoplasmosis, erythroblastosis, viral diseases, cystic fibrosis of the pancreas, hemolytic jaundice, allergy, rheumatic fever, rheumatoid arthritis, agammaglobulinemia, somanilla, endocardial fibrosis, and rickettsial infection. The diseases in which great progress has been made in treatment and care are meningitis, tuberculosis, scarlet fever, pneumonia, diabetes, and many conditions for which antibiotics are a specific. The twenty-five year progress in diagnostic procedure would take too much time to adequately evaluate. We all recognize the part x-ray has played in pinpointing pathological lesions not heretofore recognized; such for instance—the visualization of lesions after intravenous dyes, also after air injections into the central nervous system. The clinical laboratory has elaborated diagnostic tests without which we would be seriously handicapped.

Biological chemistry has developed so fast, and given so much, that its assets to our pediatric equipment can hardly be estimated.

There have been developed specific medications, procedures, and preventives that have simplified our work, as well as saved many lives; such as, antitoxin, vaccines, sulfonamides, mycins, isoniazid, P.A.S., penicillin, streptomycin, insulin, Vitamin K for hemorrhage, blood grouping, exchange transfusion, fluid balance, and steroids. Polio vaccine is on trial. Let's not forget the tranquilizing drugs.

Sanitation has been so efficient that it has practically eliminated many diseases, typhoid for example. It is estimated that by 1960 all typhoid carriers will be eliminated; therefore, typhoid immunizations will no longer be indicated. Likewise, dysentery has ceased to be the problem it was twenty-five years ago. The State Health Department sanitary engineers are on the job draining swamps and inspecting and correcting all unsanitary possibilities to safe-guard the health of the public.

Twenty-five years ago infant feeding problems caused much more concern than they do today with better sanitation, food inspection, and the more than fifty milk modifiers and substitutes available. The canned and frozen baby foods have been a boon to the busy mother, as well as supplying safe, potent foods.

Many years ago I heard the story of a surgeon who wrote a book on surgery. When he completed his text he added, "Now the last has been said." A surgeon twenty-five years ago may have reasoned that there were no more virgin fields to explore. Today, however, we marvel at the advance of surgery, more especially heart surgery; surgery of the lungs, kidneys, spleen, brain, abdomen, and extremities, has added so much to our knowledge that we feel any part of the human anatomy is amenable to modern surgery. Under the category of surgery must be mentioned the advances in anaesthesiology.

Progress in pediatrics in the past twenty-five years cannot be discussed without considering the activity of many lay organizations. All are actively instituting drives for funds for the study of the special disease in which each is interested. In many instances they operate clinics. Among these may be mentioned polio, tuberculosis, heart, muscular dystrophy, rheumatic fever, crippled children, blind, deaf, mental retardation, hemophilia, and speech defects.

The most recently developed branch of medicine closely related to pediatrics is physical medicine. While it is not limited to children, many of their problems are in the pediatric age group. Those of you who have taken the course in rehabilitation at N. Y. U. have observed their procedures. You still recall how individuals who were bed-ridden, a liability

to society, became not only self supporting, but many have earned enough to pay income tax sufficient to more than repay the cost of the rehabilitation. Their system is a brilliant example of team work. At the weekly conference is the physiatrist, pediatrician, psychiatrist, psychologist, orthopedist, speech therapist, physiotherapist, vocational therapist, social worker, brace and prosthetic mechanic, each adding his technical knowledge and training for the benefit of the case under discussion.

Is socialized medicine making inroads into the pediatric field of medicine? Does the pre-school roundup sponsored by the health department lay the ground work for further care and supervision of the child? Have the health centers and school immunization programs taken over a phase of pediatrics? Are lay organizations and health departments operating clinics driving a wedge into the practice of pediatrics? These questions cannot now be answered. The trend may be evident to some, depending on the local situation and personal experience. This Society for thirty-five years has taken an active part in supporting every movement of all agencies having as their objective the betterment of child care. This we will continue to do. With our interest and active participation we should be able to dissolve any disagreement and prevent any gross conflict of purpose.

Crime is on the increase, there is a high divorce rate, and alcoholism is a serious problem. There is now a demand for essentials which formally were considered luxuries. This has necessitated both parents working to meet their consumer credit payments; resulting in the children being placed in a nursery or left to roam the streets. There is lack of parental control with increased juvenile delinquency. Speed and tension seem to dominate our existence. All these factors are calling for more and more psychologists and psychiatrists interested in the problem child.

Our colleagues in the dental profession have now developed respect for the deciduous teeth. Formerly they did not bother to care for the teeth so soon to be shed; now the mouth of the child is given the respect it so richly deserves.

During the past twenty-five years there have been an astounding number of pharmaceuticals produced, some most valuable. Many identical or almost identical have an individual trade name to identify the manufacturer. Have we forgotten the pharmacopoeia, depending too much on the advertisements and personality of the manufacturers' representative for our therapeutic know how?

The cost of living index has gone up forty-two points since 1933. Rent, salaries, supplies, insurance, and all services and equipment have sky-rocketed in the last twenty-five years. As far as I can ascer-

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tain our fees have not risen in the ratio of the cost of operation or comparably to the other specialties.

We have cause to be proud of our accomplishments, increasing the life expectancy of man, reducing mortality and morbidity, salvaging humans once considered hopeless.

Has medicine exceeded its potentialities? We read that world population is explosive. The present population in the United States is 170,000,000; it is estimated to be 230,000,000 in 1975; and in fifty years, 550,000,000. The population of Georgia today is 3,712,000; estimated for 1975, 4,706,000. The birth rate in Georgia in 1931 was 61,000; in 1955, over 100,000. The death rate in Georgia in 1931 was sixty-eight per one thousand, while in 1955 it was down to twenty-nine. Premature death rate in 1931 was 18.7 per thousand, but only 6.2 in 1955. The trend is self evident. It has been suggested that after so many years there will be standing room only in the world. China alone at the present in-

creased birth rate will have in forty-three years a population equal to the present world population. This tremendous world population increase is thought to be a greater hazard to society than the atomic or hydrogen bomb. Some effort is being made to harness the bomb, but little effort is made to meet the problems of over population. More progress must be made to acquaint the public with the advantages of planned parenthood. Burbank once said that if we had paid no more attention to plant life than we have to human life we would today be living in a wilderness of weeds. The cry of the unborn is not as loud and distressing as the pitiful wail of the diseased, unwanted, defective, and neglected children who crowd our clinics for the underprivileged.

I have briefly reviewed the past, presenting the progress and problems of pediatrics up to the present. It has been said that when a man begins to look backward he is past his prime. Let this not be said of us as individuals or of this Society. Let us look always to the future.

THE MONTH IN WASHINGTON

THE HILL-BURTON program for U. S. grants to states to help build hospitals and other health facilities has run a successful course for almost 12 years. It has never been cut back in scope, and once (in 1954) it was expanded to take in diagnostic-treatment centers, nursing homes, chronic disease hospitals and rehabilitation centers.

On the overall, the U. S. puts up one-third of the money for a state's projects, but the state may give individual projects as much as two-thirds of their costs.

In the 12 years, 3,725 projects have been completed, are under construction, or have been approved. They represent a total investment of about \$3 billion, just under one-third of it federal money. Included are 156,658 hospital beds, 4,542 nursing beds, and almost 1,000 other facilities, such as rehabilitation centers.

Congress, as it has several times in the past, is now being asked to renew the program. Also, the Department of Health, Education, and Welfare and several organizations in the health fields have looked over the 12 years' experience, and want some changes made in the way the program is handled. None of them, however, wants to end it.

The American Medical Association, for example, is suggesting that diagnostic-treatment and public health centers be dropped from the program, and that the mandatory emphasis on rural communities also be eliminated. These and other AMA recommendations are the result of a 14-state survey by the association.

Also, the AMA joins with the Department of Health, Education, and Welfare in proposing that emphasis be placed on facilities for the chronically ill and nursing homes, and that states be given more freedom in shifting money among the various categories.

Both the AMA and the AHA want Congress to authorize loans for hospitals and nursing homes, with the

AMA recommending that loan guarantees be offered to proprietary as well as nonprofit institutions.

Before Congress are a dozen or more other suggested changes. Several groups want the research fund raised from the present \$1.5 million a year to \$4 or \$5 million, and HEW would like to be able to advance money for planning when this action would hurry construction. HEW also, along with several Congressmen and state medical societies, would like to see the eligibility requirements eased so more nonprofit groups can build diagnostic-treatment centers. Another HEW proposal would recognize a rehabilitation center even if it did not furnish psychological, social and vocational evaluation services, as well as medical; now the center has to furnish all four services.

Indications are that Congress will not allow a slip-up in extending the program, which is scheduled to expire June 30, 1959, even if it has to move along a simple extension bill, then try to work out agreement on all the suggested changes.

Regardless of what happens, Hill-Burton is undergoing more friendly—but critical—examination than it has experienced since its birth in 1946.

Notes

American Association of Medical Colleges estimates that the country's 85 medical schools will require \$275 million for rehabilitation and new construction in the next two years, not including money for research and hospital construction.

To learn how far our supplies could be stretched in event of nuclear attack, the Office of Defense Mobilization has asked Public Health Service to survey 700 wholesale drug houses, surgical supply firms and chain drug store warehouses for an inventory of their stocks.

LUTHER WOLFF IS NEW MAG PRESIDENT-ELECT



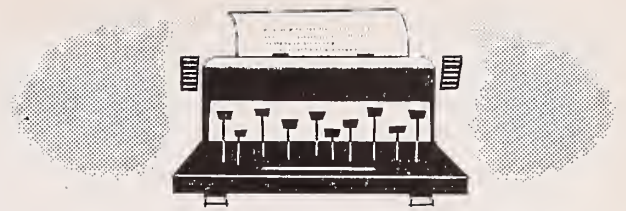
Dr. Wolff

LUTHER H. WOLFF, Columbus, was unanimously named by the Medical Association of Georgia to serve as president-elect for the year 1958-59. Dr. Wolff remained unopposed in his nomination for this office.

A native of North Carolina, Dr. Wolff is a graduate of Roanoke College. He received his M.D. degree from the University of Pennsylvania Medical School in 1932 and served his internship at Bryn Mawr Hospital, Bryn Mawr, Pa. He did graduate training at the Mayo Clinic in general and orthopedic surgery and was later awarded a Master of Science degree in Surgery from the University of Minnesota through the Mayo Foundation.

He was surgeon associated with the Beasley-Waukegan Clinic, Waukegan, Ill., before being called into military service. During the Second World War, he saw extensive service in the North African, Sicilian, and Italian Campaigns. He was awarded the Legion of Honor Medal and the Italian Medal of Military Valor for his work in field hospitals. He was discharged as a Lieutenant Colonel in the Medical Reserves.

Dr. Wolff came to Columbus in 1946 and has



editorials

been engaged in the practice of surgery since that time. He presently holds the positions of surgeon, active staff and immediate past chief of staff of St. Francis Hospital; attending surgeon, The Medical Center; and consultant surgeon, Fort Benning Hospital.

He is a diplomate of the American Board of Surgery, a fellow of the American College of Surgery, and a member of the Excelsior Surgical Society. He is an active member and past president of the Georgia Chapter of the American College of Surgery.

Dr. Wolff has been active in local, district, and state medical society affairs. He is a past president of the Muscogee County Medical Society and has served on many committees. He is presently vice-councilor from the Third District and has served on the MAG Insurance Committee for several years.

During his term as president of the Muscogee County Medical Society, Dr. Wolff was instrumental in forming the Physicians Service, the first Blue Shield Plan in the State of Georgia. He has been active in Blue Shield matters from the inception of this plan in 1950, and has been president of Physicians Service, Inc., since that time. He was also National Commissioner of the Blue Shield Plan for a term of three years.

Dr. Wolff is in several civic organizations in Columbus. He is immediate past president of the Kiwanis Club of that city and is a member of the Chamber of Commerce and of the Executive Club.

At the end of the war, Dr. Wolff was appointed Editor-in-Chief of the report "Forward Surgery of the Severely Wounded." He was also a contributor to several sections of this treatise. This work formed the basis of Vol. II. of the Medical History of World War II, recently published. Dr. Wolff is the author of several other articles published in state and national journals.

Since acquiring his medical degree, Dr. Wolff has given unstintingly of his time in the service of

his profession. His past accomplishments and his continued interest in civic and medical affairs are a sign that the Association has a great deal to look forward to under his leadership. The Association is indeed fortunate in having a man of Dr. Wolff's varied abilities ready to serve in the capacity of president.

ASIAN STRAIN INFLUENZA AND EXCESS MORTALITY

WHILE THE NEW A/Asian strain of influenza has behaved much as it should from an epidemiologist's point of view, deaths in the United States from "influenza and pneumonia" have *not*, thus providing those in the infectious disease field with one of the more fascinating and confusing epidemiologic problems of this century. For many years excess mortality (that is, mortality above seasonally expected levels, either measured by deaths from all causes or by deaths due to influenza and pneumonia) has been the best indicator of the severity of an influenza epidemic. Selwyn D. Collins and his coworkers have shown that the upswings in excess mortality through the years, usually occurring in the fall and winter months, have been closely related to epidemics of influenza of the several types. The only other factor which produces truly dramatic peaks in the excess mortality curves is the summer heat wave (and this is only recordable using mortality from all causes as the indicator). Now a precedent appears to have been shattered. For the first time a sizeable peak of excess mortality due to "influenza and pneumonia," as well as to deaths from all causes, has appeared in the absence of widespread epidemic influenza.

During the fall of 1957 influenza and pneumonia deaths rose to a sizeable peak for the United States in the week ending November 9. For that week 889 deaths were recorded from 108 reporting cities. The "normal" number of influenza and pneumonia deaths for that week would have been about 400. As the mortality figures climbed in October it was possible to measure the extent of epidemic Asian strain influenza in this country. The mortality peak was very clearly related to the presence of epidemic influenza. At the Communicable Disease Center in Atlanta the Influenza Surveillance Unit used a nationwide reporting system to follow the epidemic on a county-by-county basis. The Unit also followed and reported the findings of the U. S. National Health Survey which was organized in 1957 just in time to provide the country with a valuable new

method for measuring respiratory disease incidence. A nationwide industrial reporting system provided the Unit with still another measure of the impact of the epidemic. As the weeks passed it became increasingly apparent that there was a pattern of spread through the community. In general, and this was observed in many parts of the nation, school children were the first to be affected in a given community. More often than not children of high school age were affected before those of elementary school age. Soon thereafter industrial absenteeism would begin to rise indicating that in general the disease required a few days (about a week usually) to spread heavily from the children to their parents. The National Health Survey measure of acute respiratory disease correlated very well with the industrial absentee reporting system. The last index to rise was the mortality from influenza and pneumonia. While school epidemics probably reached their peak in mid-October and industrial absenteeism peaked in the week ending October 19, mortality only reached its high point in the first week of November. This lag probably represented at least two factors. One was the duration of time required after onset of influenzal illness before death ensued, usually from complicating pneumonia; the other was the time required for the disease to spread to the oldest and very youngest members of the community who are the least socially mobile and therefore the least likely to come in contact with the disease, and who at the same time were the most likely to succumb to the disease, or to one of its complications.

During December 1957 as the mortality from influenza and pneumonia dropped steadily week by week, the other measures of epidemic influenza also dropped, and by the end of the month all indices were close to normal seasonal levels. A great feeling of relief swept through those in this country concerned with the control and treatment of influenza.

A question still loomed, however, which had been disturbing influenza workers for many months. What were the chances for a second wave? Mortality statistics showed an apparent precedent in 1918-1919 when the great fall mortality wave (which was clearly associated with epidemic influenza) was followed by a second mortality wave in January. In addition, Japan had experienced a second wave of epidemic influenza in the early fall of 1957 after being heavily affected in May and June. Even the United States Armed Forces in Japan and Korea experienced two epidemic waves of respiratory disease. It has been learned, however, that Japan probably experienced a "split epidemic." That is, very few of those affected in the first epidemic wave were among those ill in the fall wave. Reinfections were relatively rare. Would this happen in the

United States or would there actually be a re-infection epidemic? Would the fall influenza vaccination program affect the situation? When influenza and pneumonia mortality began to rise again in January it was generally agreed that the United States might be facing a true second wave of Asian strain influenza. As the weeks passed, however, epidemiologists were astonished to discover that industrial absenteeism, school absenteeism, National Health Survey data, and other indices of epidemic influenza remained at normal levels. The Influenza Surveillance Unit carried out a number of surveys which supported the evidence of the indices. Mortality rose to a second peak while epidemic influenza did not.

By the middle of March influenza and pneumonia mortality appeared again to be on the decline. From the first of January 1958 to the time of the mortality peak there was only one report of a community-wide epidemic of respiratory disease requiring closing of schools, and there was no laboratory confirmation that this outbreak was due to the Asian strain. It was apparent that the new strain was still sporadically present throughout the country, for a number of confirmed small scattered Asian strain outbreaks were reported, and several dozen deaths following confirmed Asian strain influenza have been reported. These reports are far from enough, however, to explain the second wave of mortality.

Most of the deaths in the second mortality wave have occurred among persons over 65, and within the "influenza and pneumonia" category most of the deaths have been reported as due to pneumonia, in contrast to last fall. These facts have resulted in

two preliminary hypotheses about the second mortality upswing. First, and more likely, is the possibility that sporadic influenza underlies the deaths; that the second mortality wave resulted from pneumonia complicating Asian strain influenza in the oldest age group of the country, which was the only group not to exhaust its susceptibles in the fall epidemic. Second, and less likely, is the possibility that the deaths might represent a nationwide epidemic of staphylococcal disease; that influenza underlies few of the deaths, and that the staphylococcus has become unusually virulent, perhaps as a result of the rough treatment it received from antibiotics in the fall of 1957.

In regard to influenza vaccine, it is likely that the mortality peak in November was considerably lower than it might have been but for the vaccination of millions of persons. It is of interest that no deaths due to Asian strain influenza or its complications have yet been reported to the Influenza Surveillance Unit in persons who received vaccine. The mortality was lower than that for nine epidemics that have occurred in this country since 1920, and, of course, far lower than that of 1918. Vaccine has been shown, in general, to be between 40 and 70 per cent effective. What role the vaccination program has played in the effective disappearance of epidemic Asian strain influenza from the scene since December cannot yet be determined.

F. L. Dunn, M.D.

W. Y. Trotter, M.D.

*Influenza Surveillance Unit,
Communicable Disease Center,
Public Health Service
Atlanta, Ga.*

GEORGIA HEALTH REPORT

THE 1957 ANNUAL report of the Georgia Department of Public Health, recently presented by Dr. Thomas F. Sellers, director, reveals that almost every area of public health work was expanded during the year and many new programs were started.

In addition to basic services, a new program was started during the year to provide short term treatment for mentally disturbed people in the general hospitals around the State.

The report stated that slightly less than 100,000 live births were recorded last year. There were 32,373 deaths and 50,264 marriages.

He pointed out the opening of a Crippled Children's Clinic in Macon.

Construction was begun on 10 new hospitals or health centers and work was completed on 23 during the year.

The State continued to provide financial aid for treatment of cancer patients at a rate of about 4,000

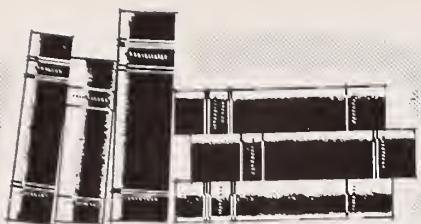
patients per year. Admissions to tuberculosis hospitals totaled 1,724, the second highest number in the history of the hospitals. Deaths from TB dropped slightly, but it is still the leading contagious disease problem. Heart disease and home and highway accidents remain the leading causes of death.

Approximately 666,000 people in 53 communities are now receiving the benefits of fluorinated drinking water.

Three counties—Spalding, Houston and Lamar—have the highest restaurant sanitation rating in the nation, so far as is officially known.

For 26 years there have been no water borne diseases reported in the State.

The report shows improvements in maternal, infant, and school health and that communicable disease rates are low while mortality figures, except for the degenerative diseases, dropped again.



physician's bookshelf

BOOKS RECEIVED

- Podolsky, Edward, M.D. (Editor), **THE NEUROSES AND THEIR TREATMENT**, Philosophical Library, New York, 555 pp., \$10.00.
- NEW AND NONOFFICIAL DRUGS**, Published under the supervision of the Council on Pharmacy, J. B. Lippincott Company, Philadelphia 1958, 631 pp.
- Whitaker, Carl A., M.D. (Editor), **PSYCHOTHERAPY OF CHRONIC SCHIZOPHRENIC PATIENTS**, Little, Brown, & Co., Boston, Mass., 1958, 217 pp., \$5.00.
- Wolstenholme, G. E. W., M.D., and O'Connor, Maeve, B. A. (Editors), **CHEMISTRY AND BIOLOGY MUCOPOLYSACCHARIDES**, Little, Brown & Co., Boston, Mass., 313 pp., \$8.50.
- Steincrohn, Peter J., M.D., **YOU CAN INCREASE YOUR HEART POWER**, Doubleday & Co., Inc., Garden City, N. Y., 378 pp. \$4.95.
- Cleave, T. L., M.R.C.P., **FAT CONSUMPTION AND CORONARY DISEASE: THE EVOLUTIONARY ANSWER TO THIS PROBLEM**, New York, 1958, 38 pp., \$2.50.

REVIEWS

EAR, NOSE, AND THROAT DYSFUNCTIONS DUE TO DEFICIENCIES AND IMBALANCES, Sam E. Roberts, M.D.; Charles C. Thomas, Springfield, Illinois, 1957.

There has long been a need for a textbook on medical otolaryngology, and this book is a creditable effort to fill that need. The author, on the basis of his long and extensive clinical experience, emphasizes the constitutional approach to the various ear, nose, and throat disorders, dysfunctions and imbalances. He takes into account the vital character of glandular activities and finds that patients suffer from various inadequacies and that glandular difficulties are often closely related to dietary problems, cellular nutrition, and metabolism. Of course these conditions are ill defined, little understood, and the therapeutic approach has of necessity been mostly empirical. However, the author uses the "therapeutic test" as clinical proof of their existence. Basic therapy is extensively discussed, but the psychic relationship to these symptoms, disorders, and therapy are insufficiently stressed.

A new syndrome is introduced—Hilgers, consisting of recurrent sore throat without positive physical findings which Hilger postulates as being due to angiodilata-

tion of the regional branches of the external carotid artery. The book's truest dictum: No one knows the real cause of allergy; no one knows the cure.

James T. King, M.D.

RUDOLPH MATAS HISTORY OF THE LOUISIANA STATE MEDICAL SOCIETY—(Volume I 252 pages, volume II 273 pages). Marshall and Hathaway Gibbens Aleman (Editors), Hope Haven Press, Marrero, Louisiana, 1957.

These two slim volumes come as a delightful surprise to anyone who knew their distinguished author as this reviewer was privileged to do. In 1926 the Louisiana State Medical Society requested Dr. Matas to prepare its own history, and this is the result of thirty years of meticulous scholarship, the last few of which were made particularly trying by the author's blindness and other infirmities of great age.

The history begins in 1817 with the formation of the *Comite Medical de la Nouvelle Orleans*; as a result of an epidemic of yellow fever in that year, this parent organization was authorized to run a lottery for the purpose of buying a library and "philosophical apparatus." The growth of organized medicine of course stopped in 1861 and in Louisiana did not resume until 1878 when the State Medical Society was formed.

In Volume I, Dr. Matas records its roster and its activities in great detail from its origin through the 1955 annual meeting. The second volume pays equally detailed attention to the development of the various constituent parish and district societies.

There are selected portraits of various officials and an adequate index. Judge John Duffy contributed an introductory chapter which sets the provincial scene in a national framework. The project was financed by the Rudolph Matas History of Medicine Trust Fund and completed by a local committee headed by Dr. Isadore Cohn. It is a most valuable piece of Americana.

Thomas Findley, M.D.

Israel S. Wechsler, M.D., **A TEXTBOOK OF CLINICAL NEUROLOGY**, 8th Edition, Illustrated. W. B. Saunders Co., Philadelphia 2, London, 1958, \$11.00.

This well known textbook of neurology has been for thirty years one of the best of the American texts, and this new eighth edition attests to its popularity. The book follows the general plan of previous editions but has been revised and brought up to date in many respects. It is difficult to cover the vast field of neurology in one volume, but basic principles of diagnosis are well presented, including psychometric tests and some discussion of the neuroses. Main emphasis is on facts of practical importance.

William A. Smith, M.D.

THE CHEMISTRY AND BIOLOGY OF PURINES—Ciba Foundation Symposium, G. E. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and C. M. O'Connor, B.Sc. (Editors) Little, Brown & Company, Boston, 1956, p. 327, \$9.00.

As the title of this volume suggests, this collection of papers will be of interest only to the rare physician with more than the usual biochemical background obtained in most medical schools. Most of the papers are given to a discussion of synthetic methods of the

Continued on page 246

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

Facial pain, which is sometimes extremely severe, may be caused by either intracranial or extracranial conditions. The differential diagnosis of facial pain is difficult and confusing. The factors which contribute to this include (a) the multiplicity of the cranial and cervical nerve sensory pathways, (b) the variability and overlap of the sensory dermatomes, (c) the extensive cortical representation, and (d) the low threshold for pain about the face. The several clinical syndromes responsible for facial pain include (a) organic etiological factors such as paranasal and dental inflammations, neoplasia of the cerebellopontine angle or middle fossa, nasopharyngeal neoplasms with extension and aneurysms or anomalous vessels; (b) tic douloureux; (c) postherpes zoster neuralgia; (d) geniculate neuralgia; (e) glossopharyngeal neuralgia; and (f) atypical facial neuralgia. The therapeutic considerations include (a) eradication of organic causes, (b) the relief by medical agents, (c) procainamide (Novocain) and alcohol block of sensory nerves, and (d) surgical section of sensory pathways. The best known clinical syndrome marked by facial pain is trigeminal neuralgia. Treatment by root section generally gives good and permanent relief of pain, but the price that patients pay for complete relief is total anesthesia in the corresponding area. One medical treatment takes advantage of the unusual neurotropic action of stilbamidine isethionate. Injected intravenously, this drug produces a trigeminal neuropathy consisting of hypesthesia and paresthesia but no motor paralysis. This action is slow but prolonged. The paresthesias which are usually self limited are troublesome in at least 20 per cent of the cases. Since this drug action affects the fifth nerve, careful differential diagnosis is essential in order to preclude futile treatment of atypical neuralgias or tics involving the seventh and ninth nerves.

Rieser, Charles, 819 Cypress Street, N.E., Atlanta, Georgia, "Vasectomy: Medical and Legal Aspects," *J. Urol.* 79:138-144 (Jan) 58.

The public has increased the frequency of requests for purposes of sterilization. The reasons are usually social or economic, rarely therapeutic. As a result of 971 replies to a questionnaire sent to the members of the American Urologic Association it was deduced that 52 per cent performed vasectomy specifically for purposes of sterilization. There were nine per cent who were aware of legal complications coincident to the operation. Interestingly, 55 per cent were acquainted with the persistence of sperm in the semen following vasectomy. An average of 53 days is required for disappearance of the sperm, in rare instances one year. Even in properly performed vasectomy spontaneous recanalization occurs between five and 10 per cent of the operations. As a preventive measure coin-

cident to prostatectomy 52 per cent accomplish vasectomy routinely. In discussing the legal aspects only 28 states have specific statutes authorizing eugenic sterilization of the mentally ill. Ten states authorize vasectomy for therapeutic reasons. Forty-four states have no laws governing vasectomy for social, domestic, or economic reasons, although four states specifically catalogue the operation as a misdemeanor or felony. In conclusion the surgeon is advised to abandon the procedure except for legally authorized eugenic reasons or clear therapeutic indications.

Kite, J. Hiram, 490 Peachtree Street, N.E., Atlanta, Georgia, "Congenital Syndactylism of Fingers," *South. M. J.* 51:160-164 (Feb) 1958.

Syndactylism of fingers is the most frequent congenital deformity of the upper extremity. Webbing of two or more fingers is a physical and psychologic handicap, which exists throughout life if not corrected by surgery.

A review has been made of eighty-six patients born with syndactylism of fingers who have been treated by the author. There were 63 per cent males and 37 per cent females. Forty-one cases were unilateral, and 45 bilateral, making 131 hands with webbed fingers.

Syndactylism was inherited in 21 per cent of the cases. It was transmitted equally through the father and mother. Fifty-three cases showed deformities in other parts of the body.

The fingers should be separated by a zigzag line, and the commissure between the fingers lined with either a rectangular flap raised from the dorsum of the fingers, or by a dorsal and volar flap. Whole thickness skin grafts should be used to cover the denuded areas.

Godwin, John T., Saint Joseph's Infirmary, Atlanta 3, Georgia, "Some Aspects of Bladder Cancer," *J. Urology* 79:84-86 (Jan) 58.

This paper is concerned with a definition of certain cooperative efforts which may be pursued by the urologist and pathologist in an effort to provide

better clinico-pathological correlation of bladder lesions.

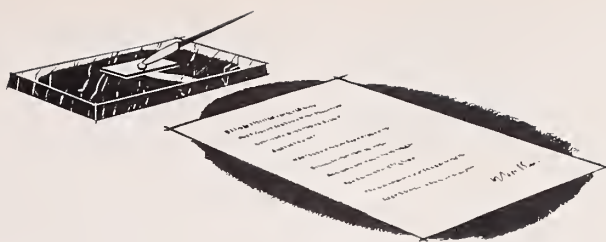
A brief review of the pertinent pathological features of bladder neoplasms is given with reference to the more significant recent investigative efforts to elucidate the spread of vesical cancer. Recommendations are made for the handling of bladder biopsy material.

Bryant, Milton F., Jr.; William D. Lazenby; and John M. Howard, Emory Hospital, Emory University, Georgia, "Experimental Replacement of Short Segments of Veins," *Arch. Surg.* 76:289-293 (Feb) 58.

Discouraging results have usually followed the insertion of replacement grafts into the vena cava of dogs. Deterling and Bhonslay observed some success with aortic homografts in the superior vena cava, but their results with ivalon (polyvinyl formalized) sponge, taffeta, of dacron and nylon, woven nylon tubing, and venous autografts were discouraging. Various authors have frequently reported complete failure, or only partial success, with grafts inserted into the vena cava of patients, but isolated reports have indicated the successful clinical replacement of segments of the vena cava.

Due to the inadequate clinical and experimental results associated with the use of replacements in the vena cava further investigation of this problem was carried out. With the dog as the experimental animal, various types of grafts were used for replacement of short segments of the inferior vena cava and femoral veins. In the current experiments, autogenous venous grafts have been the only satisfactory grafts for venous segments. Homologous and artificial grafts, while initially successful, have not remained patent.

The construction of an arteriovenous fistula, presumably by increasing the venous pressure, has allowed short-term success with "foreign-body grafts" in the venous system. These findings suggest that if the pressure in a "foreign-body graft" is above 50 cm. of water following insertion into a vein, a successful outcome can be predicted.



abstracts by georgia authors

ABSTRACTS / Continued

Wilkins, Sam A., Jr., Emory University, Georgia, "Experience with Uremic Complications after Ureterointestinal Transplantation," *Cancer* 11:40-47 (Jan-Feb) 58.

Diversion of the urinary tract, necessitated by extensive surgery within the pelvis, is fraught with many complications. Pyelonephritis and hyperchloremic acidosis followed ureterosigmoid transplantation in a large percentage of instances when the kidneys are normal and almost always when a kidney has been damaged. Contributing factors are: obstruction, transplantation above a functioning sphincter, infection, enzymatic action, quantity of colonic mucosa exposed (reverse peristalsis; selective reabsorption; excretion), diet, and many unknown factors concerning electrolyte balance. Our experience indicates that there is no significant advantage of a substitute bladder constructed from the ileum over that from a short segment of sigmoid colon. An ileo-cecal bladder does have in some hands the advantage of management without a bag.

Several patients with pyelonephritis and hyperchloremic acidosis following ureterosigmoid transplantation have been managed by isolating a segment of the sigmoid colon or the rectum as a substitute bladder with a considerable degree of success. The technique involved is relatively simple when applied either initially or at a subsequent time. The use of the rectum as a functioning substitute bladder along with a dry colostomy has some advantages and both warrants and requires further investigation.

Amersan, J. Richard; John M. Howard; and Keith D. J. Vowles, M.B., F.R.C.S. (England), Emory Hospital, Emory University, Georgia, "The Amylase Concentration in Serum and Peritoneal Fluid Following Acute Perforation of Gastroduodenal Ulcers," *Ann. Surg.* 147: 245-250 (Feb) 58.

The serum amylase concentration was significantly elevated in nine (22 per cent) of 41 patients with acute perforation of gastroduodenal ulcers. Of 26 in whom the amylase concentration of the peritoneal fluid was measured, the concentration was above 200 Somogyi units in 17 patients (65 per cent) and was above 1,500 units in three patients (12 per cent). The serum amylase concentration tends to rise as the lapse of time following the perforation increases. Qualitatively, there appears to be a similar relationship between the lapse of time and the amylase concentration of the peritoneal fluid. There

does not appear to be a direct relationship between the peritoneal and serum concentrations.

The analysis of peritoneal fluid for amylase content is not a reliable means of distinguishing between acute pancreatitis and acute perforation of a gastroduodenal ulcer.

The determination of amylase content in serum or peritoneal fluid may often prove a useful adjunct to clinical evaluation. The overwhelming evidence already accumulated demonstrates the fatal pitfalls of its indiscriminate interpretation. There is no concentration of the enzyme in serum or peritoneal fluid that is diagnostic of acute pancreatitis.

Gay, Britt B., Jr., Department of Radiology, Emory University, Georgia, "A Roentgenologic Method for Evaluation of the Larynx and Pharynx," *Am. J. Roentgenol.* 79:301-305 (Feb) 1958.

A roentgenologic routine for evaluation of lesions of laryngopharynx is presented. It has been found very satisfactory in daily practice of roentgen diagnosis. The routine consists of laminagraphy of the laryngopharynx in frontal projection, lateral soft tissue roentgenography of the neck, roentgenoscopy with the roentgenoscopic image amplifier, and roentgenoscopic and roentgenographic studies of the pharynx and cervical esophagus with thick barium paste.

McGarity, William C., and William D. Logan, Jr., Emory Hospital, Emory University, Georgia, "Multiple Peripheral Arterial Emboli," *Surgery* 43:254-257 (Feb) 58.

An arterial embolus may be one of a series, or one of several occurring simultaneously. The time element is unpredictable because embolism is a secondary condition resulting from primary disease elsewhere. It is important to keep this cause and effect relationship in mind in determining the immediate treatment and, also in considering prophylactic measures.

The data for this report consisted of 64 patients with a total of 86 peripheral arterial emboli. However, 16 (25 per cent) of the patients accounted for 38 (44 per cent) of the emboli. Auricular fibrillation and myocardial infarction were the major sources of the multiple emboli.

The treatment for multiple emboli is essentially the same as for any single embolus. If collateral circulation is inadequate to insure survival of distal tissue and the patient's condition permits, embolectomy is the treatment of choice. Whenever possible, embolectomy should be performed in cases where the embolus stops at the bifur-

cation of the aorta, iliac, and femoral vessels. Nonsurgical treatment using sympathetic blocks, anticoagulants, and oscillating bed usually gives good results when there is adequate collateral circulation.

Preventive measures are a very important adjunct to the treatment of emboli, particularly multiple emboli. Prophylactic anticoagulant therapy seems to be of definite value in reducing the likelihood of recurring emboli.

Engler, Harold S., and George F. McInnes, Medical College of Georgia, Augusta, Georgia, "Experiences with Iliac Artery and Vein Resection in Radical Pelvic Surgery," *Cancer* 11:48-52 (Jan-Feb) 58.

In evaluating a pelvic cancer for possible radical pelvic surgery, the surgeon occasionally finds that the otherwise resectable cancer has intimately involved the external and common iliac arteries and veins.

Recent developments in vascular surgery have made possible the excision of localized arterial disease and the restoration of normal blood flow through the use of arterial grafts.

Segments of major blood vessels involved by tumors of the neck, extremity, and abdomen, as well as by primary arterial disease, have been treated in this manner. This report presents two patients undergoing radical pelvic surgery requiring sacrifice of the common and external iliac arteries in whom the arterial flow was successfully restored by means of arterial substitutes. In one of these an arterial homograft was used, while for the other a combination invalon-teflon prosthesis was chosen.

In five patients, including the two herein reported, we have found it necessary to resect the common and external iliac veins because of attached metastases. Others have agreed that the resection of the common and external iliac veins is justified in certain cases and that ligation is the best available method of managing the remaining ends. It is not essential, nor is it feasible at present, to preserve venous flow by means of grafts.

The involved common and external iliac veins may be resected and the remaining ends permanently ligated with only moderate to minimal swelling and disability resulting.

In view of the dire consequence of ligation of the iliac artery, it is recommended that whenever a segment of this artery is removed, the continuity of blood flow should be restored by means of an arterial substitution. Two cases demonstrating this have been reported.

BOOK REVIEWS / Continued from Page 244

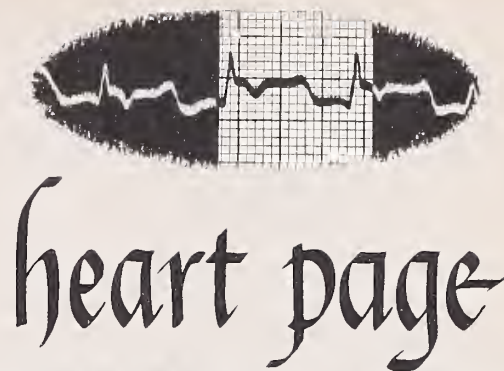
purines and their various isomers. Although most clinicians may be interested in the new purines in the B₁₂ series of vitamins and in the sugar-phosphate derivatives of the purines such as the antibiotic puromycin, the discussion given is purely in the field of chemistry. The chapter on the biological and clinical

effects of purine analogs such as 8-azapurines and 6-mercaptopurine may be of interest to those treating leukemias. The worth of this profound volume is acknowledged, but the average physician will, alas, be left far behind.

Charles L. Whisnant, Jr., M.D.

THE CARDIOLOGIST AND TOXEMIA OF PREGNANCY

FENWICK T. NICHOLS, JR., M.D.,
Savannah, Ga.



TOXEMIA OF PREGNANCY is a complex complication of pregnancy, embracing pre-eclampsia and eclampsia. The causes of this group of symptoms and its pathological processes are still unknown, and the present theories evolve around hormonal abnormalities related to the placental production of hormones of adrenocorticosteroidal structure. Standard medical texts neglect this important facet of vascular disease.

Widely differing criteria for the diagnosis as well as the classification of toxemias exist, compelling confusion in the comparison of results from different institutions.

There is no known way of preventing pre-eclampsia. The detection and correction of any abnormality which might influence the course of pregnancy, i.e., anemia, infection, nutritional deficiency, etc., should be done. A diet adequate in protein, minerals, and vitamins with a low sodium intake should be encouraged. Patients should be impressed with the necessity for following the therapeutic regime and in reporting any abnormal developments. The frequency of prenatal visits should be increased by the obstetrician and cardiologist with any unusual change or development particularly in regard to weight, blood pressure, or albuminuria.

The cardiologist and ophthalmologist are frequently called upon to help in the differential diagnosis of those suspected of having toxemia. Here adequate documentation of the past medical history, including particularly the weight, blood pressure, and the results of urinalysis are exceedingly valuable. Such knowledge will aid greatly in deciding whether the problem presented in a severely ill patient is one of an acute toxemia (pre-eclampsia) or that of a chronic disease.

Knowledge of pre-existing chronic hypertension alerts the physician to watch for signs of pre-eclampsia as these individuals are much more sus-

ceptible. The amount of change in the blood pressure as pregnancy progresses is most important in caring for the individual patient, with the patient's usual blood pressure or that in early pregnancy being used as a baseline. A persistent rise of as little as 30/15 of mercury, even though still within the presumed normal range, may be quite significant in forecasting trouble, for convulsions may occur with a blood pressure of only 140/90.

There is no specific laboratory test to differentiate between the triad of albumin, elevated blood pressure, and edema found in pre-existing renal disease, pre-existing or developing hypertensive vascular disease, and the toxemia of pregnancy. Laboratory tests have their limitation, varying with the time in pregnancy that any particular test was chosen.

The ability of the kidney to concentrate and dilute urine is the most sensitive and helpful test of renal function. The blood uric acid is elevated long before the NPN or BUN, but this is not always present even in the severer forms.

Examination of the optic fundi is most helpful. The finding of a retinal sheen (a wet, glistening appearance of the entire fundus) often precedes the usual manifest signs of toxemia and is usually first seen between six and a half to eight months. In true toxemia the retinal vessels are normal or show segmental vasospasm but no tortuosity, nicking or other signs of hypertensive retinopathy. This sheen may occasionally be seen in normal individuals but is usually localized, and it may be seen in the acute and nephrotic phase of glomerulonephritis. Hence it is not specific, but is a most worth-while diagnostic aid.

The details of management of the disease, once developed is a subject unto itself and is directed toward the earliest safe termination of the pregnancy. Newer drugs allow earlier stabilization of the pregnant patient permitting induction of labor. In

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

COUNCIL FOR HEALTH CARE OF AGED FORMED

THE FOUNDATION has been laid by some of the most important organizations in the health field to solve the problem of the health care of the aged.

For this purpose the American Dental Association, the American Hospital Association, the American Medical Association, and the American Nursing Home Association announced the establishment of the Joint Council to improve the Health Care of the Aged.

Objectives of the council, the formation of which has been under consideration for some time by the sponsoring groups, were announced as:

“(1) To identify and analyze the health needs of the aged; (2) to appraise available health resources for the aged; and (3) to develop programs to foster the best possible care for the aged regardless of their economic status.”

The Joint Council to Improve the Health Care of the Aged is made up of three representatives of each sponsoring organization.

One of the first jobs of the council will be to determine exactly what are the health problems of the aged. Studies have been underway for the past several years by the organizations making up the council, but now, through joint efforts, research will be intensified and projects for meeting the problem will be activated as rapidly as possible. The council will be the agency through which the efforts of the spon-

soring member organizations will be coordinated to solve the health problems of the aged.

The sponsoring organizations pointed out that the need for new programs in this field is accentuated by the fact that the life expectancy of individuals has been constantly increasing in recent years. In 1935 life expectancy in the United States was an average 60.2 years. The most recent figure indicates the average life expectancy now to be 70.0 years.

The council will have as one of its principal immediate projects the development of programs and facilities to be tailored to the health needs and finances of the aged.

Another facet of the council's broad-range program will be to work closely with health insurance groups in an effort to improve the coverage of the aged and to see that their insurance dollars go further.

It is the belief of the Joint Council to Improve the Health Care of the Aged that much can be done for older people by the states and communities, and the council will endeavor to stimulate the activities at these levels of government.

Special research projects are contemplated by each of the organizations supporting the council. This research will then be pooled and programs developed to meet the health needs of the aged. The ultimate goal is to provide adequate health care at reasonable costs.

HEART PAGE / Continued

the unconscious patient tracheotomy is often necessary to facilitate the maintenance of a clean airway and adequate oxygenation. The cardiologist must also help in evaluating the cardiovascular reserve and the time or need for inducing labor as well as the need for therapeutic abortion. Caesarian section is rarely necessary solely because of the toxemia, rather for OB reasons.

The fetal mortality is variously reported as being 15-50 per cent in the uncomplicated chronic hypertensive without pre-eclampsia and increased to 50

per cent or greater when pre-eclampsia is superimposed.

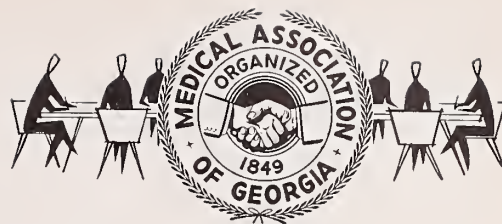
The patient with mild essential hypertension has a much better prognosis than one with chronic renal disease.

Associated diseases of the cardiovascular system, other than those mentioned, but including congenital and rheumatic heart disease are not felt to increase the incidence of toxemia.

The duration of the toxemia is probably more important than the severity for the development of permanent vascular damage. One month of pre-eclampsia is felt to be the critical period beyond which damage is apt to persist.

CALENDAR OF MEETINGS

SOCIETY	TIME	PLACE
Baldwin	June 9, 1958	Milledgeville
Bartow	June 3, 1958	Cartersville
Blue Ridge	June 13, 1958	
Chattooga	June 6, 1958	Summerville
Cherokee-Pickens	May 30, 1958	Home of Dr. and Mrs. E. A. Roper, Jasper
Cobb	June 3, 1958	Kennestone Hospital, Marietta
Colquitt	June 10, 1958	Moultrie
Crawford W. Long	June 17, 1958	Athens
Decatur-Seminole	June 10, 1958	Bainbridge
DeKalb	May 19, 1958	761 College Ave., Decatur
Dougherty	May 29, 1958	Phoebe Putney Hospital, Albany
Emanuel	June 3, 1958	Emanuel County Hospital, Swainsboro
Flint	June 4, 1958	Crisp County Hospital, Cordele
Fulton	June 5, 1958	Academy of Medicine Bldg., Atlanta
Habersham	June 5, 1958	Commercial Hospital, Cornelia
Hall	May 19, 1958	Gainesville Elks Club, Gainesville
Jefferson	June 11, 1958	Jefferson Hotel, Louisville
Laurens	May 29, 1958	Dublin Country Club, Dublin
Mitchell	May 27, 1958	Mitchell County Hospital, Camilla
Muscogee	May 27, 1958	Standard Club, Columbus
Newton-Rockdale	May 20, 1958	Newton Hospital, Covington
Ocmulgee	June 10, 1958	Cochran
Oconee Valley	June 6, 1958	M. G. Boswell Hospital, Greensboro
Peach Belt	May 20, 1958	Peach Belt Hospital, Fort Valley
Richmond	May 27, 1958	Old Medical College Bldg., Augusta
South Georgia	June 10, 1958	Pineview General Hospital, Valdosta
Spalding	June 3, 1958	Elks Club, Griffin
Tri-County	June 6, 1958	Town House, Sylvania
Upson	June 10, 1958	Upson County Hospital, Thomaston
Walker-Catoosa-Dade	May 27, 1958	Home of Dr. T. W. Alsobrook, Rossville
Ware	June 6, 1958	Waycross
Washington	May 19, 1958	Rawlings Hospital, Sandersville
Wayne	June 9, 1958	Jesup
Whitfield Hospital	May 21, 1958	Hamilton Memorial
Wilkes	May 20, 1958	Washington



the association

16 Executive Committee of Council meeting. The Council meeting of March 15-16 minutes were received for information, and the Executive Committee of Council meeting of March 16 minutes were approved as read.

Talmadge Hospital Problem

Chairman Dillinger called on Special MAG Attorney Frank Shackelford to explain a resume sheet to be presented to the AMA Board of Trustees Mediation Committee, 8:00 p.m. April 13, 1958. The resume outlined the policy of the Medical College of Georgia prior to 8/28/57; the policy of the Medical College pursuant to the resolution of the Board of Regents on 2/28/57; the unaccepted plan developed on 10/6/57 by representatives of the MAG, RCMS and the Medical College of Georgia; and the Revised Waters Resolution proposed by Richmond County Medical Society and adopted by MAG on 4/30/57. Mr. Shackelford then pointed up the discussion by analyzing the problem inherent in the Talmadge Hospital problem as: (1) Legal (2) Economic, and (3) Liaison. General discussion ensued on the proposed MAG presentation to the AMA Board of Trustees Mediation Committee. This was received for information.

1958 Annual Session

Chairman Dillinger called on Mr. Krueger who presented a letter from Council Annual Session Chairman Henry Tift requesting that the Executive Committee of Council specify who shall sit at the speaker's table for the President's Banquet to be held Tuesday, April 29 in conjunction with the 1958 Annual Session. It was voted that the seating at the main speaker's table should be as follows: MAG President and wife; MAG President-Elect and wife; MAG Secretary and wife; MAG Chairman of Council and wife; State Auxiliary President and husband; State Auxiliary President-Elect and husband; President, Local County Medical Society and wife; Chairman of the Local County Medical Society Local Arrangements Committee and wife; and, President of the Local County Medical Society Auxiliary and husband; Master of Ceremonies and wife. It was further stated that it be left up to the discretion of the Local Arrangements Committee Chairman to place a table in front on a lower level or adjacent to this main speaker's table, for other distinguished guests deemed necessary at a secondary speaker's table.

Mr. Krueger then reported on the nominations received by the Headquarters Office to date for the GP

EXECUTIVE COMMITTEE MEETING, APRIL 13

CHAIRMAN OF EXECUTIVE Committee of Council George Dillinger called the meeting to order at 5:15 p.m., April 13, 1958 in the Academy of Medicine, Atlanta, Georgia.

Members of the Executive Committee present included: W. Bruce Schaefer, Toccoa, President; Lee Howard, Sr., Savannah, President-Elect; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; George R. Dillinger, Thomasville, Chairman of Council; and J. G. McDaniel, Atlanta, Chairman of Finance. Also present were Mr. Frank Shackelford and Mr. John Moore, Special MAG Attorneys and Messrs. M. D. Krueger and John F. Kiser of the Headquarters office.

Mr. Krueger reviewed the minutes of the March 15-16 Council meeting and the minutes of the March

of the Year Award, the Hardman Award, and the MAG Distinguished Service Award.

Medicare Business

Chairman Dillinger called on Chris J. McLoughlin who introduced the matter of a Medicare Review Board appointment from Glynn County Medical Society at the request of the Council of the Medical Association of Georgia. The Glynn County Medical Society had issued three nominations to serve on this Review Board of Glynn County Medical Society and it was voted to appoint Dr. Clyde A. Wilson, Brunswick, to the Medicare Review Board.

Dr. McLoughlin then read correspondence from Dr. Frank B. Berry, Assistant Secretary of Defense in a letter dated April 1, 1958 in which the Dependent's Medical Care Advisory Committee of the Department of Defense notified the Medical Association of Georgia that a meeting will be held May 9, 1958 in the Pentagon, Washington, D. C. At this meeting the Medical Association of Georgia plans for the operation of an indemnity-type Medicare plan would be discussed. The letter further requested that the Association send only one representative to present and discuss this plan on May 9, 1958. It was voted to send Dr. Charles Jones, Atlanta, Chairman of the Medicare Review Board as the MAG representative to attend this meeting in the Pentagon, Washington, D. C., May 9, and further that his expenses incurred in attending this meeting be charged to the contingent fund.

Dr. McLoughlin then presented a proposed tentative resolution for introduction by Council to the MAG House of Delegates which reads as follows:

WHEREAS, the doctors of medicine of the State of Georgia are convinced that under Public Law 569, 84th Congress, an indemnity-type plan for Medicare is permissible, and

WHEREAS, the physicians of Georgia take exception to the imposition of a service type program, and

WHEREAS, the physicians of Georgia believe sincerely that a service type Medicare program interferes in principle and in practice with the doctor-patient relationship and contributes to the deterioration of good medical practice,

THEREFORE, BE IT RESOLVED that the Medical Association of Georgia pursue whatever course of action is deemed necessary to obtain an indemnity-type Medicare program for the State of Georgia.

It was voted that this resolution be referred to the Council of the Medical Association of Georgia meeting April 26 for consideration for introduction to the MAG House of Delegates on April 27.

MAG Council Building Committee Report

Dr. Dillinger called on Chris J. McLoughlin, Chairman of the MAG Council Building Committee, who discussed the present negotiations with Fulton County Medical Society for the MAG Headquarters Office Building site and the consideration of a House of Delegates resolution on the MAG-FCMS agreement. It was voted that the following agreement be presented

as a supplementary report of the Council of the Medical Association of Georgia to the House of Delegates for approval.

- (1) That the F.C.M.S. will permit the MAG to use on a 30 year basis, a plot of land now owned by F.C.M.S. also granting the MAG an option to renew this agreement for two consecutive periods of 30 years each on a mutually satisfactory basis.
- (2) That this plot of land be used by MAG for the purpose of erecting and maintaining an MAG Headquarters Office Building at MAG expense, used to conduct the business of MAG.
- (3) That the plot of land be that corner known as the North-East corner of the present F.C.-M.S property fronting on 7th Street and siding on Cypress Street and that this plot of land be sufficient to construct a building approximately 80 feet wide and 42 feet deep with additional footage necessary for appropriate landscaping.
- (4) That the MAG, to obtain such a 30 year agreement from F.C.M.S., would bear the expense of paving and marking out the entire area behind the Academy of Medicine for parking space with the exception of that portion of the property used by MAG and to be occupied by the MAG Headquarters Office building.
- (5) That the MAG will give to the F.C.M.S. an annual contribution of \$1.00 for the duration of the agreement.
- (6) That the F.C.M.S. will retain the right to cancel said agreement with MAG at any time provided: (A) that six months notice of such cancellation has been given MAG; and (B) that F.C.M.S. will fully reimburse MAG at a fair appraisal price of the MAG Headquarters Office building.
- (7) That F.C.M.S. will give MAG the first option to purchase the entire plot of land now owned by F.C.M.S. should at some date the F.C.M.S. consider the selling of their entire property and the cancellation of the MAG agreement.
- (8) That should taxes be levied on the F.C.M.S. property, MAG will pay its pro rata share of such taxes.
- (9) That the MAG will maintain the building and land in a manner comparable to the maintenance of the F.C.M.S. property.
- (10) That the MAG may continue to use such parking space facilities of F.C.M.S. as are necessary and will jointly and equally maintain the same.
- (11) That final approval of engineering and external architectural arrangements will be made by MAG Council and F.C.M.S. Board of Trustees.
- (12) That grading and resurfacing of the parking lot area will be done in such fashion as to make the entire lot at no greater than 6° grade and retaining walls and sewer openings be built in conformity.

The report was unanimously approved as amended.

Certificate of Appreciation

Dr. Dillinger reported that per the March 15-16 meeting of the Council of the Medical Association of Georgia, it had been voted and approved to award

Certificates of Appreciation to Drs. Marcus Mashburn, H. M. Edge, F. P. Holder, C. J. Roper, J. Lec Walker, and Charles Mulherin. Dr. Dillinger then called for additional nominations for Certificates of Appreciation, and it was approved to award Certificates of Appreciation to the outgoing President of the MAG and the outgoing President of the Woman's Auxiliary to the MAG.

It was voted to award a Certificate of Appreciation to Dr. George F. Lull of the AMA and Dr. T. A. Peterson, Savannah, for Dr. Peterson's service as 1st Vice President of the Association.

Georgia Commission on Nursing

Chairman Dillinger called on Dr. W. Bruce Schaefer who presented a request from the Georgia Commission on Nursing to mail a questionnaire to all of the physicians of Georgia and the questionnaire be returned to the Georgia Committee on Nursing. It was voted to print this questionnaire in the *Journal* with the request to the membership that the questionnaire be torn out of the *Journal* and returned to the Georgia Commission on Nursing, thus accomplishing the purpose of circularizing it to the physicians of Georgia. It was further recommended that the MAG Editor be requested to write an editorial on this subject calling attention to the questionnaire and asking the doctors to fill out and return the questionnaire.

Hospital-Medical Mediation Council Request

Chairman Dillinger called on Mr. Krueger to read a communication from Mr. Glen Hogan, Executive Secretary of the Georgia Hospital Committee requesting MAG approval of a change in the Hospital-Medical Mediation Committee composition. The request specifically asks for one additional member to be appointed to this Mediation Committee, the member to be a representative of the Georgia Chapter, American College of Hospital Administrators. It was voted to accede to this request and approve the request of the prior Medical Association of Georgia request asking that an additional physician representing either anesthesiology, radiology, or pathology be appointed to this same Mediation Committee is approved.

Newton County Medical Society Petition

Chairman Dillinger called on Mr. Kiser to present a request from the Newton County Medical Society in which they request approval of changing the name of the Society from Newton County Medical Society to Newton-Rockdale Medical Society and also request approval of their new constitution and by-laws. It was voted to refer the matter to Council at their April 26 meeting with the recommendation that the change in name be approved and the Constitution and By-Laws also be approved.

Historical Book Manuscript

Chairman Dillinger called on Chris McLoughlin who discussed the historical book manuscript submitted by Dr. J. Calvin Weaver, Chairman of the Association History and Vital Statistics Committee. This manuscript is submitted to the MAG for consideration of publication in book form and the manuscript covers the history of medicine in Georgia. It was voted that the manuscript be reviewed by the appropriate committee and that this committee be requested to report back to the Council at the earliest possible date as to the

consideration of publication of this manuscript in book form.

Review of 1958-59 MAG Standing Committee Appointments

Chairman Dillinger called on Mr. Kiser for the results of the committee appointments made by the Executive Committee of Council at their March 16 meeting, and Mr. Kiser presented the refusal letters of certain members appointed to Standing Committees and the following appointments were made based on these letters: T. A. Peterson, Savannah, Industrial Health Committee Chairman; Charles Andrews, Canton, VA Committee, Chairman; J. B. Neighbors, Athens, Public Health Committee member; Frank McKemie, Albany, Public Service Committee; Charles McArthur, Cordele, Chairman, Rural Health Committee; Katrine R. Hawkins, Sylvania, 1st District Representative Rural Health Committee; Albert L. Morris, Fairburn, 5th District Representative Rural Health Committee; Arthur M. Knight, Jr., Waycross, Mental Health Committee member.

There being no further business, the meeting was then adjourned at 7:45 p.m.

COMMITTEE ON SCHOOL CHILD HEALTH

MAG COUNCIL COMMITTEE on School Child Health Chairman, Thomas McPherson, Atlanta, called the organizational meeting of the Committee to order at 3:05 p.m., March 14, 1958.

Members of the committee present included Maurice F. Arnold, Hawkinsville; Edwin C. Shepherd, Savannah; M. D. Pittard, Toccoa; and Virginia McNamara, Atlanta. Also present were Dr. Donald A. Dukelow, Chicago, American Medical Association Bureau of Health Education and Mr. M. D. Krueger, MAG Executive Secretary.

Chairman McPherson stated that this was the first MAG committee specifically concerned with school child health and that the meeting was convened to discuss and improvise a program in Georgia. Dr. McPherson asked about the need for this committee, its aims and objectives, and the ways and means of attaining those objectives.

It was recommended that the standards for school child health must be practical and that there should be local committees to work out not only what is possible but what is practical. Another recommendation was made that there should be some investigation as to what is now being done in this area, what is the ideal, and what can be stimulated on a practical level by local committees. Further recommendation was that local committees should be appointed and a statewide conference of the committee chairmen of these committees should be held to provide a "roadmap" for the local chairman to work in his locality with his committee.

It was suggested that perhaps a state conference on "Physicians and Schools" be held largely following the pattern set in the National Conferences held by the AMA and attended by Chairman McPherson. Such a conference would be attended by physicians, educators, and public health personnel.

Dr. McPherson then called on Dr. Dukelow who

presented an analysis of physicians' interest in school child health problems. These areas were defined as follows:

1. Environment
 - a) Physical environment
 - b) Emotional climate
2. Health Services
 - a) Health appraisal—parents, teachers, nurses and physicians
 - b) Athletic
 - c) Emergency services (first aid training, etc.)
 - d) Communicable disease control
 - e) Follow up of conditions and defects detected in health appraisal program.
3. Health Instruction
 - a) Incidental to children's experience
 - b) Incidental to medical care
 - c) Didactic

Discussion and investigation of these areas ensued and it was agreed that another meeting of this committee be convened before county societies were asked to appoint committees in this field. Dr. Dukelow informed members of the committee that a packet of materials would be sent each committee member so that they might give the matter further thought and study. It was further agreed that at this next meeting the aims, objectives, and a crystallization of the ways and means of achieving the committee's objectives would be finalized so that an active program might be organized and instituted.

The meeting was adjourned at 6:00 p.m.

ANNOUNCEMENTS

Fifth Annual Mountaintop Medical Assembly, June 19-31, 1958, Waynesville, North Carolina. Program includes lectures by the following speakers: J. Willis Hurst, M.D., Atlanta; Joseph H. Patterson, Emory University, Atlanta; Col. James B. Hartgering, Walter Reed Army Hospital, Washington, D.C.; Edward Compere, M.D., Northwestern University, Chicago, Illinois; Robert Dickey, M.D., Foss Clinic, Danville, Pa.; George Crile, Jr., M.D., Cleveland, Ohio. For further information write J. Frank Hammett, Jr., M.D., Box 827, Waynesville, N. C.

Series of Seminars, Department of Medicine, Milledgeville State Hospital; each Saturday during the month of June. For complete information contact Dr. Zeb L. Burrell, Jr., Milledgeville, Georgia.

Clinical Hematology, postgraduate course for internists and pathologists, June 16-21, 1958; University of Colorado Medical Center, Denver, Colorado. Daily Laboratory Sessions; Course directed by Matthew Block, M.D., Associate Professor of Medicine and Kurt N. von Kaulla, M.D., Assistant Professor of Medicine. Fee,

\$100. Registration limited to 12 students. For details write to University of Colorado Medical Center, Office of Postgraduate Medical Education, 4200 East Ninth Avenue, Denver 20 Colorado.

Symposium on Tuberculosis and Other Chronic Diseases for General Practitioners, July 7-11, 1958, Saranac Lake, New York. Sessions to be held in various sanatoria and laboratories in the Saranac Lake area. Morning sessions from 8:30-12:30 daily, and afternoon sessions from 2:00-4:00, Monday, Wednesday, and Thursday. Elective sessions on Tuesday and Friday. Physicians wishing to make patient rounds may do so. Registration fee, \$50. For detailed information write Dr. Henry W. Leetch, Box 627, Saranac Lake, New York.

Annual Assembly in Otolaryngology, September 29-October 5, 1958, Department of Otolaryngology, University of Illinois College of Medicine, Chicago. The Assembly will consist of an intensive series of lectures and panels concerning advancements in otolaryngology and evening sessions devoted to surgical anatomy of the head and neck and histopathology of the ear, nose, and throat. Physicians interested should write to the Department of Otolaryngology, 1853 West Polk Street, Chicago 12, Illinois.

American Medical Golfing Association Annual Golf Tournament, held in conjunction with the AMA Convention, June 23, 1958, at the Olympic Lakeside Golf and Country Club, San Francisco, California. Tee off time 8 a.m. to 2 p.m. All golfing doctors are invited to attend. For information, contact James J. Leary, M.D., Secretary, 450 Sutter Street, San Francisco, California.

Medical Writing Award, sponsored by the Editors of *Modern Medical Monographs* to stimulate young physicians to achieve high standards of medical writing. Submission must be an unpublished manuscript for a short book on a clinical subject in the field of internal medicine. Entries will be judged for style and clarity of expression by a committee of the American Medical Writers' Association and for clinical interest and scientific value by the Editors and Advisory Board of *Modern Medical Monographs*. Winner will receive \$100. Possible publication of manuscript as book in the series *Modern Medical Monographs*. For rules write Dr. Irving S. Wright, Editor-in-Chief, 450 East 69th Street, New York 21, N. Y.

DEATHS

WILLIAM WRIGHT BRYAN, 49, Atlanta roentgenologist, died unexpectedly April 10. A native of Tifton, Dr. Bryan graduated from Emory University School of Medicine. He taught at Harvard, the Royal Victoria Hospital, Montreal, and University of Western Ontario, London, Ontario.

During World War II, he served with the Emory Unit in Africa and Europe and was consultant with the Third Army and the Veterans Administration here.

Dr. Bryan was on the staff of the Ponce de Leon Infirmary and Grady Hospital. He was a member of the Fulton County Medical Society, the American College

of Radiology, the American Board of Radiology, and the American Roentgen Ray Society.

He was a member of the First Presbyterian Church, the Atlanta Kiwanis Club, and the Capital City Club.

Surviving are his wife; three daughters, Miss Katherine Waldo Bryan, Miss Lamar Slaton Bryan; two sons, W. W. Bryan III, and John Carlton Bryan; two brothers; one sister; and his mother, Mrs. W. W. Bryan, Tifton.

WALTER G. CRAWLEY, 55, Marietta pediatrician, died March 22.

Born in Summerville, Dr. Crawley graduated from Emory University Medical School and served his residency at Piedmont Hospital, Atlanta. He did postgraduate work at Emory, Tulane University, and the Mayo Clinic, Rochester.

Active in medical groups, Dr. Crawley was twice president of the Cobb County Medical Society, vice-president of the Georgia Pediatrics Society, and former president of the Lancaster, S. C., Medical Society.

He was a member of the First Methodist Church, Marietta, the Marietta Rotary Club, the American Heart Association and the Marietta Elks.

Survivors are his wife; two sisters, Mrs. J. H. Barrow, West Point, Ga. and Mrs. J. W. D. Moodie, Atlanta; and four brothers, T. B. Crawley, Atlanta, C. C. Crawley, Dalton, the Rev. Frank Crawley, Decatur, and the Rev. Joe Crawley, Miami Beach, Fla.

I. M. LUCAS, Albany, died April 3, following a brief illness. Dr. Lucas was 76 years old.

Born in Litchfield, Kentucky, Dr. Lucas had been a resident of Albany since 1925. He was graduated from the University of Louisville and did graduate work at New York University.

He was a member of the First Baptist Church of Albany, the Dougherty County Medical Society, and the Albany Kiwanis Club.

Survivors include his two daughters, Mrs. Marion L. Hall and Mrs. Robert G. Holman, Albany, and four grandchildren.

Resolution of the Thomas-Brooks Medical Society on the death of Charles H. Watt

"THE DEATH OF *Charles H. Watt, Sr.*, has brought sorrow to a host of people who loved, trusted, and admired him; and it will be difficult to fill the place he has so ably and efficiently filled in Thomasville and Thomas County.

"Charles H. Watt, was a life long resident of Thomasville, born December 21, 1886. He attended Davidson College where he received an A. B. degree. He received his M.D. degree from John Hopkins in 1912. Surgical resident training was received at Roosevelt Hospital, New York City; Henry Ford Hospital; and University Hospital, Augusta, Georgia. He served with the U. S. Army Medical Corps from 1917 until 1919.

"He was a member of the Thomas-Brooks Medical Society, Medical Association of Georgia, American Medical Association, Southern Surgical Association, was a Fellow of the American College of Surgeons, and

Diplomate of the American Board of Surgery of which he was one of the founders.

"As Dr. Watt has had such an outstanding part in all phases of religious and civic life in this community; and,

"As he has labored faithfully and efficiently in alleviating suffering humanity regardless of race, color, creed, social, or financial conditions; and

"As he has been a tower of strength in promoting and maintaining the high degree of medicine and surgery practiced in this community:

BE IT RESOLVED:

"That Thomasville and Thomas County has lost a most valued and efficient physician and surgeon; and

"That the Thomas-Brooks Medical Society has lost a guiding personality who was a friend to and co-worker with each member and whose presence will be missed always: and

"BE IT FURTHER RESOLVED: that a copy of these resolutions be put in the minutes of the Thomas-Brooks Medical Society, a copy be sent to the family of Dr. Watt, and a copy be sent to the *Thomasville Times Enterprise* and the *Journal of the Medical Association of Georgia*."

SOCIETIES

In observance of the annual "Doctor's Day," MAG county societies joined with their local auxiliaries for a time of recreation. BALDWIN COUNTY celebrated with a "come-as-you-are party" highlighted by a picnic supper. . . . Members of BIBB COUNTY MEDICAL SOCIETY were honored by their wives with a dinner-dance at the Idle Hour Country Club in Macon. . . . The CARROLL-DOUGLAS-HARALSON MEDICAL SOCIETY and auxiliary celebrated with a pirate party beginning with a dinner followed by a treasure hunt. . . . "Do You Remember" was the theme of the FULTON COUNTY "Doctor's Day" party held at the Atlanta Standard Club. . . . A buffet supper honored members of the RANDOLPH-TERRELL MEDICAL SOCIETY. . . . SUMTER COUNTY MEDICAL SOCIETY and auxiliary celebrated with a dinner and placed flowers in the lobby of the local hospital in memory of the county's deceased physicians. . . . Wives of the TIFT COUNTY physicians gave a dinner at the home of Dr. and Mrs. Charles Zimmerman, Tifton. Following the dinner, the group paid tribute to C. S. Pittman, Sr., by the reading of his biography. . . . A buffet supper followed by a program of music and skits was sponsored by the auxiliary of the WARE COUNTY MEDICAL SOCIETY.

The BULLOCH-CANDLER-EVANS MEDICAL SOCIETY met recently to discuss a proposed mental health program for Public Health District No. 7. It was recommended to extend efforts to establish a Mental Hygiene Clinic in this district and also to establish a Planned Parenthood Clinic separate from other clinics in the county.

Charles N. Buchanan, M.D., pediatric neurologist at the University of Chicago presented the annual

SOCIETIES / continued

Witman Memorial Lecture at a recent meeting of the BIBB COUNTY MEDICAL SOCIETY.

"Conquest of Fear" was the theme of the anti-cancer exhibit sponsored by the FLOYD COUNTY MEDICAL SOCIETY in Rome. The purpose of the exhibit was to show the public that early cancer is curable and to explain the methods of treatment and cure. Outstanding physicians from Tennessee, New York, and Atlanta were on hand to answer questions on the subject. Three movies on cancer were also shown to the public.

At a recent meeting of the GEORGIA MEDICAL SOCIETY, Victor C. Vaughan, professor of pediatrics at the Medical College of Georgia, Augusta, was the principal speaker.

The MUSCOGEE COUNTY MEDICAL SOCIETY sponsored a Chattahoochee Valley Spring Clinic in April, inaugurating a series of medical programs which have been planned for the area. The society hopes to sponsor an even larger clinic in the fall.

The SOUTH GEORGIA MEDICAL SOCIETY sponsored a South Georgia - North Florida Symposium on Cancer last March. Six cancer specialists were featured on the program. The symposium was under the direction of the Georgia Division, American Cancer Society.

Members of the THOMAS-BROOKS COUNTY MEDICAL SOCIETY met in Quitman recently for dinner and a program featuring James M. Sitton, Public Health Service, Atlanta, and William A. Smith, M.D., Atlanta.

James V. Rogers, Atlanta radiologist, spoke to members of the WARE COUNTY MEDICAL SOCIETY on the subject of roentgenological investigation of the chest.

The SECOND DISTRICT MEDICAL SOCIETY held its semi-annual meeting in April in Moultrie. Following a social hour and dinner, the following speakers were featured on the scientific program: Thomas Ross, Macon, "Unusual Heart Disease"; Gary McKay, Thomasville, "Radiographic Examination of the Colon"; Clayton E. Wood, Albany, "Steroid Therapy in Dermatology."

The SEVENTH DISTRICT MEDICAL SOCIETY recently sponsored a cancer symposium in conjunction with the American Cancer Society, Georgia Division. Some of the subjects discussed at the meeting were "Cancer of the Thyroid," "Cancer of the Skin, with Special Emphasis on Recent Research," "Intra-Epithelial Cancer in Obstetrical and Gynecological Patients," and "Lymphomas."

Hoke Wammock, Augusta; Arthur M. Knight, Jr., Waycross; and William S. Clark, Jr., Waycross were guest speakers at the EIGHTH DISTRICT MEDICAL SOCIETY MEETING held recently. Dr. Wammock discussed surgical management of head and neck malignancies. Dr. Knight spoke on hypertensive and cardiac complications of diabetes, and Dr. Clark talked on corneal transplants.

PERSONALS

First District

CURTIS G. HAMES, Claxton, appeared as guest speaker for Grand Rounds at the Medical College of Georgia recently. He described the heart research being conducted in Evans County.

JULIAN K. QUATTLEBAUM, JR., Savannah, spoke to the Savannah Rotary Club recently on the subject of surgery.

BENJAMIN C. WILLS, Savannah neuropsychiatrist, has been granted a fellowship in neurology at Mt. Sinai Hospital in New York City. The research will include a study on the brain waves in cases of tumors and vascular diseases of the brain. Following completion of the course, he will resume his practice in Savannah.

Second District

JAMES H. CROWDIS, Blakely, has recently been elected president of the Blakely Rotary Club.

Third District

BOYCE T. RAINEY, Buena Vista, was honored by members of the auxiliary of the Third District Medical Society by a reading of his biography.

Fourth District

R. L. BENNET, Medical Director of the Georgia Warm Springs Foundation, was the guest speaker at a meeting of the Manchester Kiwanis Club. Dr. Bennet told of the origin of the Warm Springs Foundation and its progress and growth. He also discussed the Foundation's plans for the future.

Speaking to members of the LaGrange Optimists Club recently, ENOCH CALLAWAY, head of the West Georgia Cancer Clinic discussed the operation of that clinic and the number and type of patients treated.

ENRIQUE MONTERO, Griffin, was guest speaker at a meeting of the Jackson Kiwanis Club recently. Dr. Montero discussed the operation of the Griffin-Spalding County Hospital.

Fifth District

The Atlanta Radiological Society recently elected the following new officers for 1958-59. RICHARD A. ELMER, president; J. FRANK WALKER, vice-president; J. L. CLEMENTS, JR., secretary-treasurer.

The appointment of BERNARD L. HALLMAN and CHARLES A. LEMAISTRE, Emory University to new administrative posts at Grady Memorial Hospital has been approved by the Fulton-DeKalb Hospital Authority. Dr. Hallman will become director of professional services and Dr. LeMaistre will become coordinator of clinics.

DANIEL C. ELKIN, Lancaster, Kentucky, and F. PHINIZY CALHOUN, Atlanta, were recipients of the first awards of honor to be presented by the Emory University Medical Alumni Association. The citations,

given at the association's annual banquet, were in recognition of contributions to medical science and to the community and university.

R. A. BARTHOLOMEW, Emory University, has received a grant from the National Institute of Health to direct continuing research on a type of toxemia found in pregnancy.

The Southeastern Surgical Congress has elected B. T. BEASLEY, Atlanta, as president for 1960. Dr. Beasley formerly served as secretary-director general of the congress.

LESTER A. BROWN, Atlanta, will be one of the guest speakers at the American Medical Association convention in San Francisco. Dr. Brown will discuss the subject of "Vertigo, Its Differential Diagnosis."

At the 40th annual meeting of the American Radium Society, ROBERT L. BROWN, Atlanta, was elected secretary.

ALLEN M. COLLINSWORTH, Atlanta, senior director of the Industrial Medical Association, attended the annual meeting in Atlantic City. For the past two years, Dr. Collinsworth has served with the I.M.A. Committees on Medical Practice, Liaison, Civil Defense, Mental Health, and Standards for Vehicle Driving.

WILLIAM A. HOPKINS, Atlanta, chest and heart surgeon, addressed students and faculty of College Park High School on the subject of smoking and chest diseases.

JACK C. NORRIS and B. R. GENDEL, both of Atlanta, were speakers at the Greenville Postgraduate Seminar held in Greenville, S. C. Dr. Norris spoke at the banquet on the subject "This Modern World, Medically and Otherwise." Dr. Gendel addressed the group at one of the scientific sessions.

Sixth District

E. A. HENSLEY, Gibson, was recently presented a certificate of appreciation from the National Selective Service System for 15 years of service to that organization.

JOHN J. PILCHER of Wrens was recently named mayor pro-tem for the year 1958 by the city's Council.

At a regular meeting of the Gray Kiwanis Club, THOMAS L. ROSS, of Macon, spoke on the subject of "The Heart."

WILLIAM H. SOMERS, Macon, lectured on "Atomic Medicine" at a meeting of the Private Duty Nurses Section, Sixth District of the Georgia State Nurses Association.

Seventh District

RAYMOND F. CORPE, Rome, was a speaker at the postgraduate course on diseases of the chest held recently at Grady Hospital. The course was sponsored by the Council on Postgraduate Medical Education of the American College of Chest Physicians.

W. B. DILLARD, Cartersville, was recently installed as president of the Bartow-Polk-Floyd Tuberculosis Board. At this April meeting JOHN H. GROSS, president of the Trudeau Society was guest speaker.

VIRGINIA H. MALEY, Cartersville, spoke to the Cartersville Kiwanis Club on the subject of cancer. Dr. Maley is president of the Bartow County Chapter of the American Cancer Society.

Eighth District

W. L. FLESCHE, Waycross physician, has been elected president of the community's Concert Association.

DISKIN MORGAN, Douglas, addressed students of Coffee County High School on the subject of alcohol.

RALPH D. ROBERTS, Fitzgerald, attended a meeting of the Southern Medical Association held recently at the Roosevelt Hotel in New Orleans.

Ninth District

W. BRUCE SCHAEFER, Toccoa, was the guest speaker at the annual banquet of the Alpha Kappa Kappa medical fraternity at Emory University.

Tenth District

WILLIAM J. CRANSTON and GUY TALMADGE BERNARD, Augusta, have received the title of Professor Emeritus of the Medical College of Georgia by special action of the Georgia Board of Regents. Dr. Cranston, clinical professor of medicine, has been on the faculty since 1915. Dr. Bernard, clinical professor of surgery, became a faculty member in 1907. Both are still active in their teaching assignments.

CURTIS H. CARTER, Augusta, was the guest speaker during the annual meeting of the Augusta Area Tuberculosis Association held recently.

A. D. DUGGAN, Washington, recently returned from attending the New Orleans Medical Assembly at the Roosevelt Hotel.

THOMAS P. FINDLEY, Augusta, was one of the guest speakers at the 76th Annual Meeting of the New Mexico Medical Society, Albuquerque, New Mexico. Dr. Findley spoke on "Peripheral Vascular Diseases" and was the moderator for a panel discussion on "Management of the Geriatric Patient."

CHARLES FREEMAN, Augusta, has been elected a diplomate of the American Board of Orthopedic Surgery at the meeting of the American Academy of Orthopedic Surgery held in New York.

POMEROY NICHOLS, Augusta neurosurgeon, was one of the physicians taking part in a medico-legal forum held in Savannah. The forum was concerned with "whiplash" injuries of the spinal cord.

The National Vitamin Foundation recently honored VIRGIL P. SYDENSTRICKER, of Augusta, with a symposium named for him on problems of human nutrition. Dr. Sydenstricker was also guest of honor during the banquet following the symposium.

VICTOR C. VAUGHAN, Augusta, spoke to members of the local Rotary Club on the subject of juvenile delinquency.

MORTON WITTENBERG, Augusta, attended the mid-west conclave of the American Pediatric Association in Chicago where he was a guest speaker. Dr. Wittenberg presented a paper on "Adverse Reactions to Insoluble Corticosteroids."

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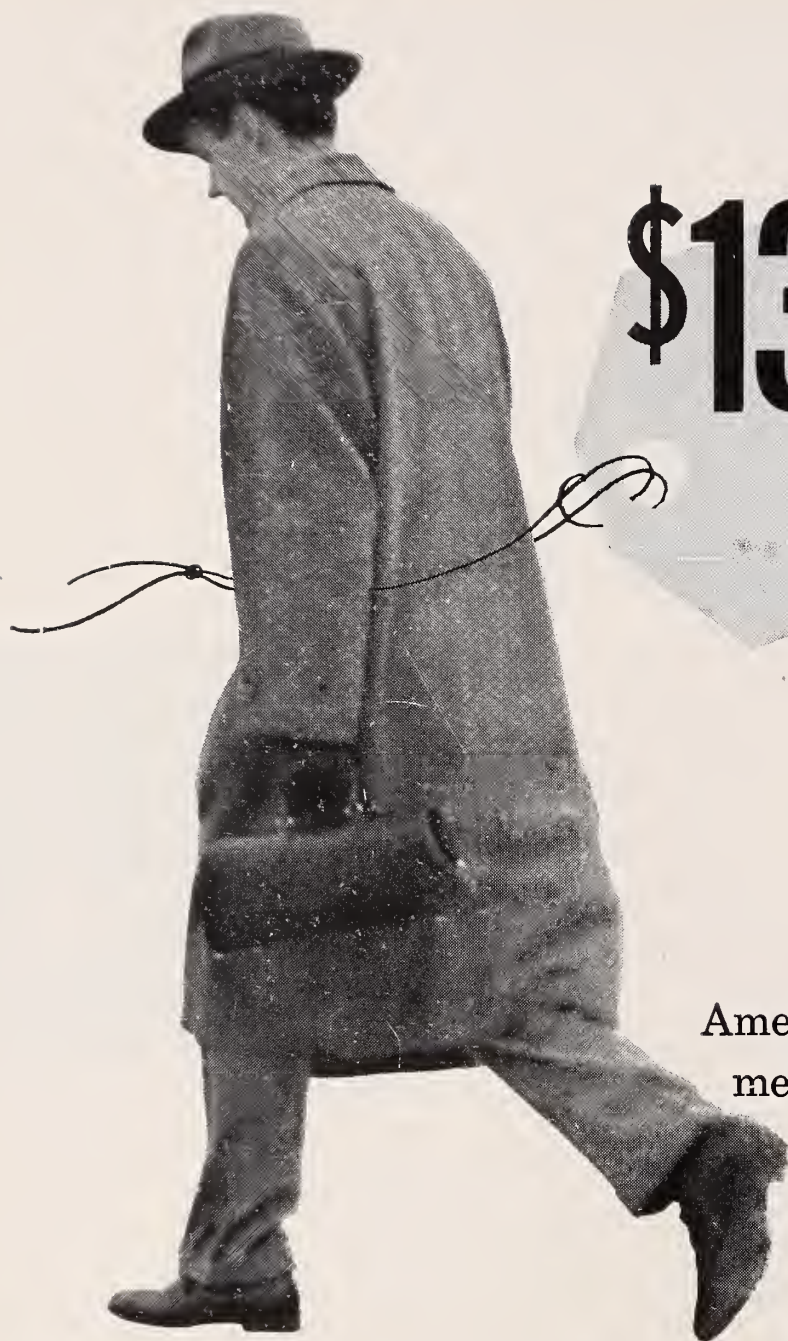
Syrup: Each teaspoonful (5 cc.) of caramel-flavored syrup contains 250 mg. of sulfamethoxyipyridazine. Bottle of 4 fl. oz.

References: 1. Griebble, H. C. and Jackson, G. G.: Prolonged Treatment of Urinary-Tract Infections with Sulfamethoxyipyridazine. *New England J. Med.* 258:1-7, 1958. 2. Editorial *New England J. Med.* 258:48-49, 1958. 3. Jones, W. F., Jr. and Finland, M., Sulfamethoxyipyridazine and Sulfachloropyridazine. *Ann. New York Acad. Sc.* 60:473-483, 1957.

*Reg. U. S. Pat. Off.



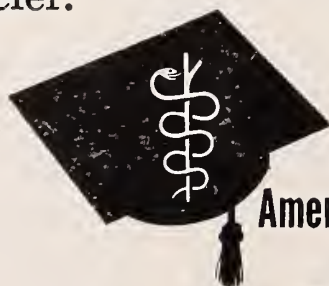
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THE PRESIDENT'S ADDRESS

THE FUTURE OF MEDICINE

W. BRUCE SCHAEFER, M.D., *Toccoa, Georgia*

Presented April 28, 1958, Macon

A FULL YEAR HAS passed and due almost entirely to your unfailing support of my efforts, the year has been a fairly successful one. I am delighted to have this opportunity to express my deepest appreciation for the support that you have accorded me. A year ago I made certain statements concerning what I believed and what I wanted to do, and briefly, I would like to reiterate and recapitulate on them. The Medical Association of Georgia is making great progress. Never before in its history have we had such enthusiastic and hard working committees, committees with foresight and vision; and it has been my privilege to work with a group of officers who have envisioned the dreams of the committees and have set the mechanism in motion to bring about their fulfillment. These things you have seen in your handbook, and I hope they meet with your approval.

The Year's Accomplishments

We have settled the Talmadge Hospital problem with, I believe, a solution agreeable to all, and the Liaison Committee has been requested by Dr. Pund through the district societies. This committee will be nominated by the district and elected by the President of the Medical College of Georgia.

We have gone on record demanding the free choice of physician for patients in Georgia, especially industry, and we hope to see the fulfillment of this program.

We will shortly see hospital and medical care available to the medically indigent throughout Georgia through the Hospital Indigent Care Commission.

This should go into effect by July 1st in all participating counties. We have seen Medicare grow under



W. BRUCE SCHAEFER
PRESIDENT, 1957-58

doctors' supervision and with a few recommended changes this year that program goes well. We have laid the foundation for a permanent MAG home

which we hope to see carried through in the next year. Our relations with other professional groups have been strengthened, especially the legal profession, and a code of ethics has been adopted for the two professions. At the same time we have endeavored to strengthen the internal bonds of our profession.

The Future of Medicine

My subject here today is of my own choosing, and for it I have chosen that which is closest to my heart, the future of medicine. Certainly, today, we stand on the greatest threshold in our history. The antibiotic age, the mycin era, the atomic prechroma, or tranquilizer times—which is it? A little less than 2,000 years ago, the Lord sent his disciples into the world to preach the gospel of Life, Peace, and Brotherhood. Unfortunately, while man has moved toward the goal of peace and brotherhood at a painfully halting walk, he has moved toward scientific self-destruction at a mad gallop. A columnist said, “The world is having a rendezvous with destiny.” Some of us are more inclined to think it is having a blind-date with fate. Nevertheless, we all realize that science and medicine are traveling at a terrific rate, but is it good? We have seen in the past few years pneumonia, polio, syphilis, and most other infectious diseases, conquered. We have seen music and pictures taken from the air. We have seen man-made satellites. We have seen atomic powered machines and atomic generated electricity, but we have also seen America become the greatest drug taking nation ever in the history of man.

Our science and biological laboratories have worked night and day producing stronger and longer lasting tranquilizers for an ever increasing nervous population without stopping to consider the causes or the effects. Up until the time of John Harvy in 1540, the blood was considered the soul. Later, the heart was considered the seat of the soul. Today, we judge Heaven by its furniture and Hell by its temperature, but is there not some chemical change that is blood-born that gives us a good feeling toward man? Adrenalin is pumped into the blood stream, so we are told, in times of anger or fright. What is the chemical that gives us a feeling of charitableness towards man? Would not one dose of that be equal to a million tranquilizers to cure hatred, envy, and deceit?

The future of medicine is good. We are told that the age barrier will soon be broken, and that we will reach the ages of the Bible, of over 100 to 150. Yes, we are told that the cure of cancer is just over the

horizon, and we are told that heart disease and atheromatosis will soon be as obsolete as the dodo bird. We have flourine in our water to prevent tooth decay. We have chlorine in our water to prevent intestinal diseases. We have vitamins to prevent fatigue or tired blood, but what chemical can we have and will we have in our food and water that will prevent self-glorification and the creation of Hitlers, Napoleons, and Stalins.

Code of Ethics for Modern Doctors

This is not a drug that will subdue us, but one that will give us that warm, rich feeling that comes from doing good to someone without reward, a drug that will make us realize that to err is human, that this is not a perfect world. Families and friends have many foibles. Perfection is rarely attained. We are all, however, human beings with a very short span on this world. Until this drug is developed, it behooves us as doctors o medcfine and leaders o mefn to go back to that original code of ethics as handed down by the great physician, Luke, who said, “As ye would that men should do to you, do ye also to them likewise.” The AMA, I am told, has been rewriting the Code of Ethics for the past two years and still cannot come up with anything better than that which Luke gave nearly two thousand years ago.

Organized Medicine Faces Dangers

With our increasing population and our more competitive practice of medicine, I beseech you as doctors to take note that politicians will wait only for the opportune moment, and the opportune moment grows closer as more and more of us disregard the social changes taking place today over our country and in our own organization. Sinister influences are working night and day to undermine our system of free enterprise and the free choice of physician that has made American medicine the greatest in the world. There are doctors in our midst who think only of their own personal ambitions and who sell the profession as a whole, short. There are members of our government who have pledged themselves to the destruction of organized medicine, and there are subversive groups that are constantly working to undermine the United States and the last bulwark of democracy, organized medicine.

Therefore, it behooves us as practicing physicians in this rapidly progressing scientific age to repledge ourselves to the teachings of Aesculapius and Hippocrates and go back to the ethics of Luke; for as I say, the future of medicine is good, the future of organized medicine depends on you.

HIGHLIGHTS OF THE ANNUAL SESSION

UNANIMOUS APPROVAL OF new operational policies for the Eugene Talmadge Memorial Hospital at Augusta by the House of Delegates highlighted the *104th Annual Session of the Medical Association of Georgia, April 27-30, 1958, at Macon.

Other issues acted on by the delegates included endorsement of an indemnity-type plan under Medicare; approval of a statewide Physician Lawyer Code of Cooperation; recommendation that a one-year internship be required for licensure in Georgia; endorsement of the Georgia Hospital-Medical Mediation Council; authorization for Council to proceed with plans for an MAG Headquarters Office Building; and disapproval of a Forand Bill type legislation and endorsement of the Joint Council to Improve the Health Care of the Aged.

Dr. Lee Howard, Sr., of Savannah was installed as President succeeding Dr. W. Bruce Schaefer of Toccoa. Dr. Luther H. Wolff of Columbus was named President-Elect.

House of Delegates

One hundred and five delegates from 50 component medical societies convened at the First Session of the House of Delegates Sunday, April 27th to consider the numerous reports, supplementary reports, and resolutions. Five reference committees met on Monday and reported their findings to the House on Wednesday morning.

Talmadge Hospital Policies

In an unprecedented move, the House of Delegates at its first session unanimously adopted the new operation policies of the Eugene Talmadge Memorial Hospital as agreed to by all parties concerned at a meeting in Augusta, April 15, 1958. There follows below the new plan:

PROPOSED OPERATIONAL POLICIES FOR THE MEDICAL COLLEGE OF GEORGIA AND THE EUGENE TALMADGE MEMORIAL HOSPITAL AND PROPOSALS FOR RELATIONS WITH MEDICAL SOCIETIES AND ASSOCIATIONS.

Liaison Committee

It was agreed that a liaison committee would be established to be constituted as follows. The district medical societies shall propose two names each and the Medical College of Georgia is to choose one name of the two. One member from each of the ten districts will provide ten members for the Liaison Committee. In addition, the Liaison Committee shall include an Executive Committee of two members of the Richmond County Medical Society to be chosen by RCMS, two members from the Medical College of Georgia to be chosen by the Medical College, and one member of the Medical Association of Georgia who resides outside of Richmond County, to be chosen by the Council of the Medical Association of Georgia. The full fifteen-man Committee shall meet once every six

months. The Executive Committee, the Chairman of which shall be the MAG representative, shall meet as often as necessary and shall have power to deal with all matters subject to report to the full Liaison Committee.

Admissions

It is not and shall not become the policy of the Medical College of Georgia and the Eugene Talmadge Memorial Hospital to enter into the competitive practice of medicine. Admission of patients of unusual teaching interest shall be favored. It is realized, however, that emergencies and unusual circumstances will arise in which patients who are not indigent will require the services of these institutions. No other pay (private) patients shall be admitted. This policy shall apply to both in and out patients.

The term "unusual circumstances" shall be understood to apply to those patients whose problems in the opinion of their referring doctor can be especially appropriately cared for at the Eugene Talmadge Memorial Hospital. Any question or controversy arising will be referred to the Liaison Committee in writing for the Committee's consideration.

No patient may be accepted by the institution except by proper referral of his *regular attending physician*.

Pay (private) patients admitted under the category of emergencies without referral by a doctor should be discharged or transferred from the Eugene Talmadge Memorial Hospital when and if their condition permits.

Disposition of Professional Fees

Faculty members providing professional services to patients of the Hospital shall determine the charges for such services. The fees paid to the faculty members for such professional services may be paid into a special research fund. This special research fund shall not accrue to the general budget of the Board of Regents, Eugene Talmadge Memorial Hospital, or the Medical College of Georgia. Such special fund shall be used exclusively to defray the cost of medical research projects.

The faculty of the Medical College of Georgia shall determine the character and extent of such medical research projects to be supported by these funds. There shall be no contractual obligation between the Medical College of Georgia and its faculty members to pay such professional fees into the special Research Fund.

Public Relations

Publicity emanating from the Medical College of Georgia and the Eugene Talmadge Hospital shall be in good taste and consistent with the standards of the American Medical Association and the standards set by the Liaison Committee.

AMA Mediation Committee

Both Council and the House of Delegates expressed their gratitude to the AMA Mediation Com-

HIGHLIGHTS OF ANNUAL SESSION/Cont.

mittee that assisted in the solution of the Talmadge Hospital problem. The committee was composed of representatives of the AMA and the Association of American Medical Colleges.

The following resolution in regard to the Mediation Committee was introduced by Council and adopted by the House of Delegates:

WHEREAS, in many states diversity of opinion arises between state and local medical organizations and the medical schools concerning ethics and other matters involving the practice of medicine, and

WHEREAS, these problems are often aired in the public press and in the courts to the detriment of American medicine.

NOW, THEREFORE BE IT RESOLVED by the Council and the House of Delegates of the Medical Association of Georgia that the Board of Trustees of the American Medical Association be authorized by the AMA House of Delegates to give thought and consideration to the setting up of a permanent mediation committee or board, to be set up jointly by the American Medical Association and the Association of American Medical Colleges and that board or committee be available, when requested by the local medical organization of the Medical Association or medical college for the purpose of mediating such difficulties.

AND, BE IT FURTHER RESOLVED that the Council and the House of Delegates of the Medical Association of Georgia authorize their delegates to the American Medical Association to introduce this resolution to the House of Delegates of the American Medical Association at the coming San Francisco session.

Medicare

The House of Delegates endorsed an indemnity-type plan for the Medicare Program in Georgia, as follows:

WHEREAS, the doctors of medicine of the State of Georgia are convinced that under Public Law 569, 84th Congress, an indemnity-type plan for Medicare is permissible, and

WHEREAS, the physicians of Georgia take exception to the imposition of a service type program, and

WHEREAS, the physicians of Georgia believe sincerely that a service type Medicare program interferes in principle and in practice with doctor-patient relationship and contributes to the deterioration of good medical practice.

NOW, THEREFORE BE IT RESOLVED that the Medical Association of Georgia pursue whatever course of action is deemed necessary to obtain an indemnity-type Medicare program for the state of Georgia.

Forand Bill

The House of Delegates adopted a strongly-worded resolution in regard to health care of the aged. The resolution recognized the "great need for development of programs to foster the best possible

health care for the aged regardless of their economic status," but stated that the Forand Bill, presently pending in Congress, is not the "proper approach to the problem."

The resolution stated that the problem of caring for our aged is extremely important and "cannot be solved by further government encroachment on the private practice of medicine but must be met and solved by the efforts of free enterprise in the best American tradition."

Further, the resolution strongly endorsed the newly established "JOINT COUNCIL TO IMPROVE THE HEALTH CARE OF THE AGED," which has been set up by the American Dental Association, the American Hospital Association, the American Medical Association and the American Nursing Home Association.

MAG Building

Council was authorized to go ahead with plans for a Headquarters Office building. The official action empowered Council "to proceed with the purchase or lease of suitable property for an MAG Headquarters Office building and further be empowered to make contractual arrangements for the erection and maintenance of said building."

Miscellaneous Action

The House approved a statewide Code of Cooperation for physicians and lawyers similar to codes that have been adopted in other states. This document was drawn up by a joint committee of Georgia physicians and lawyers. It will be proposed for approval at the May meeting of the Georgia Bar Association and subsequently mailed to all members of both professions . . . The Constitution and By-Laws was amended to require physicians having their predominant practice in the area of a county medical society jurisdiction join that particular county society . . . Approval was given to the formation of the Georgia Hospital-Medical Mediation Council. This Council will provide a mediation service to local hospitals and medical staffs, develop education programs for improvement of medical-administrative-trustee relations on the hospital level, and stimulate and assist small hospitals in attaining acceptable standards of operation. The Council will be composed of two representatives of the Georgia Hospital Association, two representatives of the Medical Association of Georgia, two representatives of the Georgia Association of Hospital Governing Boards and one each from the Georgia Chapter, American College of Surgeons, Georgia Academy of General Practice, Georgia Department of Public Health, and the Georgia Association of Hospital Administrators and one physician representing the Georgia Pathologists, Anesthesiologists and Radiologists.

OFFICIAL PROCEEDINGS

***104th Annual Session**

of the

MEDICAL ASSOCIATION OF GEORGIA

Macon, April 27-30, 1958

First Session, House of Delegates

Second Session, House of Delegates

General Business Session

General Business Session (SECOND SESSION)

* In 1956 it was brought to the attention of the House of Delegates that the numbering of annual sessions was inconsistent with the actual number of sessions. To rectify this mistake, this session, instead of being the 108th, is the second 104th.

FIRST SESSION, HOUSE OF DELEGATES

Sunday, April 27, 1958

THE FIRST SESSION of the House of Delegates of the Medical Association of Georgia was called to order by Speaker Thomas W. Goodwin, Augusta, at 5:10 p.m., Sunday, April 27th in the Walter Little Room, Hotel Dempsey, Macon, Georgia, in conjunction with the *104th Annual Session of the Association.

Speaker Goodwin delivered the invocation.

Speaker Goodwin then called for the preliminary report of Delegates' attendance and J. Frank Walker, Atlanta, Chairman of the House Credentials Committee, reported that more than 40 of the registered members of the House were present. Speaker Goodwin declared a quorum present and accounted for, and the House in Session. Dr. Walker later made the following complete report on attendance.

Attendance

In a compilation of attendance taken from the official roll, 50 county medical societies were represented by their duly elected delegates or alternates. Twenty-three medical societies were not represented at this First Session. Of a total of 130 authorized delegates from their respective medical societies, the official roll showed 105 delegates present at this Session.

BIBB: Allen A. Cole, W. W. Baxley, Milford B. Hatcher, Rudolph W. Jones, Jr., E. C. McMillan, Thomas H. Williams; BULLOCH-CANDLER-EVANS: L. H. Griffin; CARROLL-DOUGLAS-HARALSON: R. L. Denney, J. V. Vansant; CHATTAHOOCHEE: Rupert H. Bramblett; CHATTOOGA: William P. Martin; CLAYTON-FAYETTE: F. A. Sams, Jr.; COBB: Bruce D. Burleigh, E. P. Inglis, Jr., W. C. Mitchell; COFFEE: Horace G. Joiner; COLQUITT: John P. Tucker; COWETA: Ben H. Jenkins; DECATUR-SEMINOLE: Charles G. Bellville; DeKALB: L. C. Buchanan, George L. Mitchell; Floyd R. Sanders; DOUGHERTY: Charles C. Lamb; EMANUEL: R. J. Moye; FLINT: Charles E. McArthur; FLOYD: A. V. Gafford, Coleman T. King, Ralph N. Johnson; FRANKLIN-HART: J. Hubert Milford; FULTON: Charles D. Adams, Thomas J. Anderson, Jr., John S. Atwater, Helen Bellhouse, Linton H. Bishop, Jr., James H. Byram, Don F. Cathcart, Amey Chappell, Marvin L. Davis, Edwin C. Evans, George W. Fuller, Alton V. Hallum, Haywood N. Hill, H. W. Jernigan, Fleming L. Jolley; A. H. Letton, A. O. Linch, Mason I. Lowance, Marvin A. Mitchell, William Mercer Moncrief, Jack C. Norris, David Henry Poer,

Lester Rumble, Jr., Dan Y. Sage, John W. Turner, Exum Walker, J. Frank Walker; GLYNN: Joseph B. Mercer, C. A. Wilson; GEORGIA MEDICAL SOCIETY: John L. Elliott, Ruskin King, T. A. Peterson, Leonard J. Rabhan; GORDON: Lewis R. Lang; HABERSHAM: Joe J. Arrendale; HALL: Rafe Banks, Jr., P. K. Dixon; JACKSON-BARROW: P. T. Scoggins; JEFFERSON: C. Roy Williams; JENKINS: A. P. Mulkey; LAURENS: William A. Dodd; CRAWFORD W. LONG: James A. Green, R. H. Randolph; McDUFFIE: A. G. LeRoy; MUSCOGEE: Willis P. Jordan, Luther J. Roberts, S. A. Roddenbery, Charles R. Smith; NEWTON-ROCKDALE: H. E. Griggs; OCMULGEE: Maurice F. Arnold; OCONEE: C. S. Jernigan; POLK: Don W. Schmidt; RANDOLPH-TERRELL: R. B. Martin, III; RICHMOND: W. A. Fuller, F. N. Harrison, R. C. McGahee, David R. Thomas, Jr., A. J. Waters; SOUTH GEORGIA: F. G. Eldridge; SPALDING: Virgil B. Williams; SUMTER: Carl P. Savage; TELFAIR: Charles T. Cowart, H. H. Hammett, Jr.; WALKER-CATOOSA-DADE: Howard C. Derrick, Fred H. Simonton; WALTON: Lynn M. Huie; WARE: W. L. Pomeroy, Leo Smith; WARREN: H. B. Cason; WASHINGTON: Joseph E. Lever; WAYNE: J. W. Yeomans; WHITFIELD: Paul L. Bradley; WORTH: H. G. Davis, Jr.

County Medical societies not represented at this Session of the House of Delegates were as follows:

ALTAMAHA, BALDWIN, BARTOW, BEN HILL-IRWIN, BLUE RIDGE, BURKE, CHEROKEE-PICKENS, GRADY, JASPER, LAMAR, MERIWETHER-HARRIS, MITCHELL, PEACH BELT, RABUN, SCREVEN, SOUTHEAST GEORGIA, SOUTHWEST GEORGIA, STEPHENS, TAYLOR, THOMAS-BROOKS, TRI-COUNTY, UPSON, WILKES.

Reference Committees

Speaker Goodwin then appointed the following House of Delegates reference committees:

REFERENCE COMMITTEE NO. 1: Charles T. Cowart, LaGrange, Chairman; J. Hubert Milford, Hartwell, Vice-Chairman; Amey Chappell, Atlanta, Secretary; James H. Byram, Atlanta; L. M. Shealy, Quitman; Roy L. Denney, Carrollton; R. B. Martin, III, Cuthbert; E. C. McMillan, Macon; C. A. Wilson, Brunswick; F. O. Garrison, Demorest.

REFERENCE COMMITTEE NO. 2: Milford B. Hatcher, Macon, Chairman; Willis P. Jordan, Columbus, Vice-Chairman; Don Schmidt, Cedartown, Secretary; John S. Atwater, Atlanta; H. E. Weems, Perry; J. W. Palmer, Ailey; A. J. Waters, Augusta; H. J. Copeland, Griffin; Irving D. Helenga, Toccoa; S. L. Hancock, Cairo.

REFERENCE COMMITTEE NO. 3: Thomas J. Anderson, Jr., Atlanta, Chairman; C. J. Roper, Jasper, Vice-Chairman; Paul L. Bradley, Dalton, Secretary; R. C. McGahee, Augusta; T. A. Sappington, Thomaston; Ralph N. Johnson,

Rome; L. H. Griffin, Claxton; Luther J. Roberts, Columbus; Leo Smith, Waycross M. F. Arnold, Hawkinsville.

REFERENCE COMMITTEE NO. 4: W. L. Pomeroy, Waycross, Chairman; J. H. Yeomans, Jesup, Vice-Chairman; Linton H. Bishop, Jr., Atlanta, Secretary; T. A. Peterson, Savannah; H. E. Griggs, Conyers; James A. Green, Athens; A. V. Gafford, Rome; S. A. Roddenbery, Columbus; Charles G. Bellville, Bainbridge; F. A. Sams, Jr., Fayetteville.

REFERENCE COMMITTEE NO. 5: H. H. Hammett, Jr., LaGrange, Chairman; C. Roy Williams, Wadley, Secretary; David Henry Poer, Atlanta; P. K. Dixon, Gainesville; H. G. Davis, Jr., Sylvester; Wm. H. Fulmer, Savannah; Allen A. Cole, Macon; Charles E. McArthur, Cordele; L. C. Buchanan, Decatur.

Credentials and Tellers Committees

Speaker Goodwin announced the prior appointments of the House of Delegates Credentials and Tellers Committee as follows:

Credentials Committee: J. Frank Walker, Atlanta, Chairman; Virgil Williams, Griffin; and F. G. Eldridge, Valdosta.

Tellers Committee: Alton V. Hallum, Atlanta, Chairman; H. L. Dismuke, Ocilla; and John P. Tucker, Moultrie.

Approval of 1957 Minutes

To expedite the reading and adoption of the minutes of the 1957 House of Delegates held in conjunction with the *103rd Annual Session of the Medical Association of Georgia, meeting in Savannah, April 28-May 1, 1957, the Chair entertained a motion that these minutes as published in the June 1957 issue of the *Journal of the Medical Association of Georgia* be approved. It was duly moved and seconded and this motion was approved.

Memorial Service

Speaker Goodwin then introduced Dr. Henry J. Stokes, Jr., Pastor of the First Baptist Church, Macon, Georgia, who conducted the Memorial Service for the members deceased during the past year. After the prayer, Speaker Goodwin called the names of the departed colleagues:

M. A. ACREE, Calhoun, December 4, 1957
T. J. ARLINE, Cairo, July 7, 1957
W. W. BRYAN, Atlanta, April 10, 1958
B. R. BUSSELL, Waycross, July 15, 1957
BENJAMIN L. CAMP, Atlanta, January 25, 1958
E. F. CHAFFIN, Toccoa, May 22, 1957
T. C. CLODFELTER, Milledgeville, December 27, 1957
FRANK CORLEY, Atlanta, October 7, 1957
J. A. COYLE, Dublin, August 15, 1957
WALTER G. CRAWLEY, Marietta, March 22, 1958
J. W. DANIEL, Claxton, June 26, 1957
H. L. ERWIN, Dalton, October 16, 1957
FRANK ESKRIDGE, Atlanta, October 7, 1957
EUGENE B. FERRIS, New York, September 22, 1957
JOHN B. FITTS, Atlanta, March 5, 1958
C. C. GIDDENS, Valdosta, February 17, 1958
HOMER HEAD, Monroe, December 17, 1957
L. P. HOLMES, Augusta, October 29, 1957
T. W. JACKSON, Manchester, April 30, 1957
J. F. JOHNSON, Macon, January 12, 1958
CHARLES E. LAWRENCE, Atlanta, November 16, 1957
J. E. LESTER, Marietta, May 23, 1957
M. S. LEVY, Smyrna, May 23, 1957
I. M. LUCAS, Albany, April 3, 1958

W. R. McCOY, Folkston, August 31, 1957
JOSEPH D. McELROY, Atlanta, April 26, 1957
W. C. McGEARY, Madison, November 15, 1957
JAY McLEAN, Savannah, April 15, 1957
R. V. MARTIN, Savannah, April 15, 1957
L. C. MITCHELL, Columbus, November 28, 1957
CLIFFORD MOORE, Lindale, April 26, 1957
W. L. MOSS, Athens, August 12, 1957
C. G. MOYE, Dublin, August 25, 1957
RICHARD M. NELSON, Atlanta, February 6, 1958
J. T. NORVELL, Augusta, December 30, 1957
T. E. ODEN, Blackshear, February 9, 1958
C. B. PALMER, Covington, June 3, 1957
L. P. PHARR, Auburn, October 14, 1957
MARION G. PRUITT, Atlanta, July 16, 1957
C. L. ROLES, Camilla, February 23, 1958
FRANK S. SCHLEY, Columbus, October 21, 1957
J. F. SCHNEIDER, Atlanta, February 9, 1958
EDGAR D. SHANKS, JR., Atlanta, January 2, 1958
L. H. SHELLHOUSE, Willacoochee, January 2, 1958
W. E. SIMMONS, Metter, August 30, 1957
E. J. SMITH, Hahira, August 1, 1957
LINTON SMITH, Atlanta, December 10, 1957
J. W. STANFORD, Cartersville, February 23, 1958
C. A. STEVENSON, Camilla, February 1, 1958
L. B. TAYLOR, Savannah, April 27, 1957
LAWSON THORNTON, Atlanta, June 27, 1957
H. L. TREUSCH, Washington, D. C., March 27, 1958
S. A. VISANSKA, Atlanta, July 15, 1957
S. L. WAITES, Covington, October 30, 1957
D. D. WALKER, Macon, August 23, 1957
W. A. WALKER, Cairo, February 20, 1958
CHARLES H. WATT, Thomasville, January 21, 1958
J. CALVIN WEAVER, Atlanta, April 20, 1958
R. F. WHEAT, Bainbridge, August 5, 1957
HAL M. DAVISON, Atlanta, April 26, 1958

Annual Reports

Speaker Goodwin then called for the annual reports of officers, council, councilors, vice-councilors, and committees as the next item of business. (A cross reference of the reports of officers, council, councilors, vice-councilors, and committees and allied reports as introduced at this Session is listed below with the Reference Committee to which the report was referred. The full report and action by the Reference Committee and the House of Delegates is listed under the proceedings of the Second Session of this House of Delegates. See pages 270-319.)

REPORTS OF OFFICERS

President—W. Bruce Schaefer, Toccoa — Reference Committee No. 1—See page 270.
President-Elect—Lee Howard, Sr., Savannah—Reference Committee No. 1—See page 271.
Immediate Past President—Hal M. Davison, Atlanta—Reference Committee No. 1—See page 272.
First Vice-President—T. A. Peterson, Savannah—Reference Committee No. 2—See page 282.
Second Vice-President—H. J. Bickerstaff, Columbus—Reference Committee No. 2—See page 282.
Secretary—Chris J. McLoughlin, Atlanta—Reference Committee No. 2—See page 282.
Treasurer—Chris J. McLoughlin, Atlanta—Reference Committee No. 2—See page 284.
AMA Delegates—C. H. Richardson, Sr., Macon; Eustace A. Allen, Atlanta; and Spencer A. Kirkland, Atlanta Reference Committee No. 1—See page 272.
Speaker of the House — Thomas W. Goodwin, Augusta—Reference Committee No. 3—See page 290.

REPORT OF COUNCIL

Report of Council—George R. Dillinger, Chairman, Thomasville—Reference Committee No. 3—See page 291.

REPORTS OF COUNCILORS AND VICE-COUNCILORS

First District Councilor and Vice-Councilor—Charles T. Brown, Guyton—Reference Committee No. 4—See page 301.

Second District Councilor and Vice-Councilor—George R. Dillinger, Thomasville, and J. Z. McDaniel, Albany—Reference Committee No. 4—See page 302.

Third District Councilor and Vice-Councilor—W. G. Elliott, Cuthbert, and Luther Wolff, Columbus—Reference Committee No. 4—See page 302.

Fourth District Councilor and Vice-Councilor—J. W. Chambers, LaGrange, and Virgil Williams, Griffin—Reference Committee No. 5—See page 311.

Fifth District Councilor and Vice-Councilor—J. G. McDaniel, Atlanta, and Charles S. Jones, Atlanta—Reference Committee No. 5—See page 312.

Sixth District Councilor and Vice-Councilor—Henry H. Tift, Macon, and George H. Alexander, Forsyth—Reference Committee No. 5—See page 312.

Seventh District Councilor and Vice-Councilor—D. Lloyd Wood, Dalton, and Ralph W. Fowler, Marietta—Reference Committee No. 1—See page 275.

Eighth District Councilor and Vice-Councilor—F. G. Eldridge, Valdosta, and James M. Hicks, Brunswick—Reference Committee No. 1—See page 276.

Ninth District Councilor and Vice-Councilor—C. R. Andrews, Canton, and Paul T. Scoggins, Commerce—Reference Committee No. 1—See page 276.

Tenth District Councilor and Vice-Councilor—Addison Simpson, Jr., Washington, and David R. Thomas, Jr., Augusta—Reference Committee No. 2—See page 286.

REPORTS OF COMMITTEES

Cancer—Hoke Wammock, Augusta, Chairman—Reference Committee No. 5—See page 312.

Constitution & By-Laws—Thomas W. Goodwin, Augusta, Chairman—Reference Committee No. 3—See page 295.

Geriatrics—Edgar Woody, Jr., Atlanta, Chairman—Reference Committee No. 5—See page 313.

Hospital Relations—Milford B. Hatcher, Macon, Chairman—Reference Committee No. 4—See page 303.

Industrial Health—Robert M. Harbin, Rome, Chairman—Reference Committee No. 4—See page 304.

Crawford W. Long Memorial—Lester Rumble, Jr., Atlanta, Chairman—Reference Committee No. 4—See page 305.

Insurance & Economics—David R. Thomas, Jr., Augusta, Chairman—Reference Committee No. 5—See page 314.

Maternal and Infant Welfare—Charles M. Mulherin, Augusta, Chairman—Reference Committee No. 5—See page 314.

Medical Defense—Charles S. Jones, Atlanta, Chairman—Reference Committee No. 5—See page 315.

Legislation—J. Frank Walker, Atlanta, Chairman—Reference Committee No. 1—See page 277.

Veterans Affairs—Hartwell Joiner, Gainesville, Chairman—Reference Committee No. 2—See page 287.

Woman's Auxiliary—Virgil B. Williams, Griffin, Chairman—Reference Committee No. 2—See page 287.

Public Health—Hugh J. Bickerstaff, Columbus, Chairman—Reference Committee No. 3—See page 297.

Public Service—John P. Heard, Decatur, Chairman—Reference Committee No. 4—See page 305.

Rural Health—J. Lee Walker, Clarkesville, Chairman—Reference Committee No. 4—See page 306.

Scientific Exhibit Awards—Ted F. Leigh, Emory University, Chairman—Reference Committee No. 5—See page 315.

Mental Health—Rives Chalmers, Atlanta, Chairman—Reference Committee No. 3—See page 298.

Blood Banks—G. Lester Forbes, Jr., Atlanta, Chairman—Reference Committee No. 1—See page 277.

Crippled Children—J. C. Hughston, Columbus, Chairman—Reference Committee No. 3—See page 298.

Medical Civil Preparedness—Edgar M. Dunstan, Atlanta, Chairman—Reference Committee No. 2—See page 287.

Lectureship—David Henry Poer, Atlanta, Chairman—Reference Committee No. 3—See page 298.

Ministerial Liaison—Needham B. Bateman, Atlanta, Chairman—Reference Committee No. 1—See page 278.

Physician-Lawyer Liaison—Hal M. Davison, Atlanta, Chairman—Reference Committee No. 5—See page 316.

Eyecare of the Newborn—J. Jack Stokes, Atlanta, Chairman—Reference Committee No. 2—See page 288.

American Medical Education Foundation—George T. Nicholson, Cornelia, Chairman—Reference Committee No. 4—See page 309.

Radiologic Safety—Robert M. Tankesley, Atlanta, Chairman—Reference Committee No. 4—See page 310.

School Child Health—Thomas C. McPherson, Atlanta, Chairman—Reference Committee No. 5—See page 319.

Veterans of Foreign Wars Liaison—W. Bruce Schaefer, Toccoa, Chairman—Reference Committee No. 2—See page 288.

ALLIED REPORTS

Headquarters Office—Messrs. Milton D. Krueger and John F. Kiser, Atlanta—Reference Committee No. 3—See page 299.

Journal of the Medical Association of Georgia—Edgar Woody, Jr., and Miss Helen L. Hendry, Atlanta—Reference Committee No. 1—See page 279.

Woman's Auxiliary to the Medical Association of Georgia—Mrs. John L. Elliott, Savannah, President—Reference Committee No. 2—See page 288.

General Practitioner of the Year Award

Speaker Goodwin called on Chairman of Council George R. Dillinger to present nominations received by Council for the 1958 "Georgia General Practitioner of the Year Award." The following names were presented: Gordon Chason, Bainbridge; J. C. Logan, Plains; Francis X. Mulherin, Augusta; J. W. Palmer, Ailey, and Fred H. Simonton, Chickamauga.

Speaker Goodwin called for nominations from the floor and there being none, he requested that a vote by secret ballot be taken by the House Tellers Committee. Tellers Committee Chairman Alton V. Halum announced the following results: Fred H. Simon-ton, Chickamauga, elected "Georgia General Practitioner of the Year."

Hardman Award

Speaker Goodwin called on T. A. Peterson, Savannah, Chairman of the Council Hardman Award Committee to present nominations received by the Council for this high honor. Dr. Peterson presented the nomination of Dr. Enoch Callaway, LaGrange. Dr. Goodwin stated that there would be no necessity for a ballot and announced that Dr. Enoch Callaway of LaGrange was the 1958 recipient of the Hardman Award.

Speaker Goodwin then called for unfinished business and there being none, he called for the introduction of supplementary reports.

Supplementary Reports

Council Supplementary Report No. A: Talmadge Hospital Operational Policy—George R. Dillinger, Thomasville, Chairman—Reference Committee No. 3—See page 291.

Council Supplementary Report No. B: MAG Headquarters Building—George R. Dillinger, Thomasville, Chairman—Reference Committee No. 3—See page 301.

Third District Councilor Supplementary Report No. C—W. G. Elliott, Cuthbert—Reference Committee No. 4—See page 302.

Rural Health Committee Supplementary Report No. D—J. Lee Walker, Clarkesville, Chairman—Reference Committee No. 4—See page 309.

Hospital Relations Supplementary Report No. E—Milford B. Hatcher, Macon, Chairman—Reference Committee No. 4—See page 303.

Legislation Committee Supplementary Report No. F—Eustace A. Allen, Atlanta, Vice-Chairman—Reference Committee No. 1—See page 281.

Council Supplementary Report No. G: —Indemnity Type Medicare Program—George R. Dillinger, Thomasville, Chairman—Reference Committee No. 3—See page 300.

Council Supplementary Report No. H: AMA Mediation Committee—George R. Dillinger, Thomasville, Chairman—Reference Committee No. 3—See page 300.

Crawford W. Long Committee Supplementary Report No. I: Museum Maintenance—Lester Rumble, Jr., Atlanta, Chairman—Reference Committee No. 4—See page 305.

Speaker Goodwin at this time requested the members of the House to give attention to the Supplementary Report of Council No. A: Talmadge Hospital Operational Policies. Dr. Goodwin noted that this report was referred to Reference Committee No.

3 but stated that it merited special consideration by the House at this time.

Speaker Goodwin then called on Chairman of Council George Dillinger who read the Supplementary Report of Council No. A: Talmadge Hospital Operational Policies to the members of the House as follows:

Talmadge Hospital Operational Policies

Operational policies for the Medical College of Georgia and the Eugene Talmadge Memorial Hospital for relations with the Medical Societies and Associations were tentatively agreed upon in Augusta, Georgia, April 15, 1958. The Medical College of Georgia was represented by their President and representatives of the faculty and Board of Regents; the Richmond County Medical Society by its Board of Trustees; and the Medical Association of Georgia by its Executive Committee of Council and its Special Legal Counsel. The Medical College of Georgia ratified these proposals as did the RCMS. It is hereby strongly recommended that the MAG House of Delegates join with these other two groups and ratify and approve the following proposals:

LIAISON COMMITTEE

It was agreed that a liaison committee would be established to be constituted as follows. The district medical societies shall propose two names each and the Medical College of Georgia is to choose one name of the two. One member from each of the ten districts will provide ten members for the Liaison Committee. In addition, the Liaison Committee shall include an Executive Committee of two members of the Richmond County Medical Society to be chosen by RCMS, two members from the Medical College of Georgia to be chosen by the Medical College, and one member of the Medical Association of Georgia who resides outside of Richmond County, to be chosen by the Council of the Medical Association of Georgia. The full fifteen-man Committee shall meet once every six months. The Executive Committee, the Chairman of which shall be the MAG representative, shall meet as often as necessary and shall have power to deal with all matters subject to report to the full Liaison Committee.

ADMISSIONS

It is not and shall not become the policy of the Medical College of Georgia and the Eugene Talmadge Memorial Hospital to enter into the competitive practice of medicine. Admission of patients of unusual teaching interest shall be favored. It is realized, however, that emergencies and unusual circumstances will arise in which patients who are not indigent will require the services of these institutions. No other pay (private) patients shall be admitted. This policy shall apply to both in and out patients.

The term "unusual circumstances" shall be understood to apply to those patients whose problems in the opinion of their referring doctor can be especially appropriately cared for at the Eugene Talmadge Memorial Hospital. Any question or controversy arising will be referred to the Liaison Committee in writing for the Committee's consideration.

No patient may be accepted by the institution except

by proper referral of his *regular attending physician*.

Pay (private) patients admitted under the category of emergencies without referral by a doctor should be discharged or transferred from the Eugene Talmadge Memorial Hospital when and if their condition permits.

DISPOSITION OF PROFESSIONAL FEES

Faculty members providing professional services to patients of the Hospital shall determine the charges for such services. The fees paid to the faculty members for such professional services may be paid into a special research fund. This special research fund shall not accrue to the general budget of the Board of Regents, Eugene Talmadge Memorial Hospital, or the Medical College of Georgia. The fund shall be used exclusively to defray the cost of medical research projects.

The faculty of the Medical College of Georgia shall determine the character and extent of such medical research projects to be supported by these funds. There shall be no contractual obligation between the Medical College of Georgia and its faculty members to pay such professional fees into the special Research Fund.

PUBLIC RELATIONS

Publicity emanating from the Medical College of Georgia and the Eugene Talmadge Memorial Hospital shall be in good taste and consistent with the standards of the American Medical Association and the standards set by the Liaison Committee.

Upon completion of the reading of this Supplementary Report No. A, Dr. Dillinger explained the background and the history of the Talmadge Hospital Operational Policies.

Speaker Goodwin then recognized A. J. Waters, Richmond, who moved that the House of Delegates acting as a Reference Committee of the whole approve and adopt at this time the Supplementary Report of Council No. A: Talmadge Hospital Operational Policies. On vote, Supplementary Report No. A: Talmadge Hospital Operational Policies, was unanimously adopted by the House. (Speaker Goodwin then ruled that there would be no necessity for referring this report to Reference Committee No. 3

as previously ordered, based on this unanimous action of the House.)

Speaker Goodwin called for New Business and the following resolutions were introduced by members of the House and referred to the proper reference committee.

RESOLUTIONS

Resolution No. 1—Tax Reduction on Fraternity Houses—Richmond County Medical Society—Reference Committee No. 2—See page 290.

Resolution No. 2—Retirement Fund—Richmond County Medical Society—Reference Committee No. 5—See page 319.

Resolution No. 3 — American Registry of Doctors' Nurses—Sumter County Medical Society—Reference Committee No. 4—See page 310.

Resolution No. 4—Time and Place of Annual Session—J. Frank Walker, Atlanta, for Fulton County Delegation—Reference Committee No. 3—See page 301.

Resolution No. 5—Notification of Increase in Dues—Muscogee County Medical Society Delegation—Reference Committee No. 2—See page 290.

Resolution No. 6—Notice of Meetings—Glynn County Medical Society Delegation—Reference Committee No. 3—See page 301.

Resolution No. 7—Medicare—Glynn County Society Delegation—Reference Committee No. 3—See page 300.

Resolution No. 8—Ethics—Glynn County Medical Society Delegation—Reference Committee No. 1—See page 280.

Speaker Goodwin called for other items of new business and there being none he then called on AMA Delegate Eustace Allen of Atlanta, who introduced Dr. Gunnar Gundersen of LaCrosse, Wisconsin, President-Elect of the American Medical Association, who addressed the House of Delegates on the subject "Your American Medical Association in 1958."

At the close of Dr. Gundersen's address, the meeting was recessed at 6:35 p.m.

SECOND SESSION, HOUSE OF DELEGATES

(Recessed)

Wednesday, April 30, 1958

THE SECOND SESSION (Recessed) of the House of Delegates of the Medical Association of Georgia was called to order by Speaker of the House Thomas Goodwin of Augusta at 9:05 a.m., April 30, 1958, in the Macon Auditorium, Macon, Georgia, in conjunction with the *104th Annual Session of the Association.

Speaker Goodwin called on Credentials Committee Chairman J. Frank Walker, Atlanta, for a pre-

liminary report of Delegates in attendance. Dr. Walker reported that more than 40 of the registered members of the House were present. Speaker Goodwin declared a quorum present and accounted for, and the house in session. Dr. Walker made the following complete report on attendance.

Attendance

In a compilation of attendance taken from the

official roll, 34 county medical societies were represented by their duly elected delegates or alternates. Thirty-nine county medical societies had no representatives at the Second Session. Of a total of 130 delegates from their respective county medical societies, the official roll showed 72 delegates present at this session.

BIBB: Allen A. Cole, Milford B. Hatcher; CHATTAHOOCHEE: Rupert H. Bramblett; CHATTOOGA: William P. Martin; CHEROKEE-PICKENS: C. J. Roper; CLAYTON-FAYETTE: F. A. Sams, Jr.; COBB: W. C. Mitchell, E. A. Musarra; COLQUITT: John P. Tucker; DeKALB: L. C. Buchanan, George L. Mitchell, Floyd Sanders; EMANUEL: R. J. Moye; FLINT: Charles E. McArthur; FRANKLIN-HART-ELBERT: J. Hubert Milford; FULTON: Thomas J. Anderson, Jr., John S. Atwater, Helen W. Bellhouse, Linton Bishop, Jr., Don Cathcart, Amey Chappell, Edwin C. Evans, Henry Finch; F. James Funk, Jr., Alton V. Hallum, Lyle F. Herrmann, H. W. Jernigan, Fleming L. Jolley, A. H. Letton, A. O. Linch, Mason I. Lowance, John N. McClure, Marvin A. Mitchell, W. Mercer Moncrief, David Henry Poer, Dan Y. Sage, Exum Walker, J. Frank Walker, August S. Yochem, Jr.; GEORGIA MEDICAL SOCIETY: John L. Elliott, Lee Howard, Jr., Ruskin King, T. A. Peterson; GLYNN: Joseph B. Mercer, C. A. Wilson; GORDON: Lewis R. Lang; HABERSHAM: F. O. Garrison; JACKSON-BARROW: Paul T. Scoggins; JEFFERSON: C. Roy Williams; McDUFFIE: Albert G. LeRoy; MUSCOGEE: Luther J. Roberts, Charles R. Smith; NEWTON-ROCKDALE: H. E. Griggs; OCMULGEE: M. F. Arnold; POLK: Don W. Schmidt; RICHMOND: W. A. Fuller, F. N. Harrison, R. C. McGahee, David R. Thomas, Jr., A. J. Waters; SOUTH GEORGIA: F. G. Eldridge; SPALDING: Virgil Williams; STEPHENS: I. D. Hellenga; TROUP: C. T. Cowart, H. H. Hammett, Jr.; WALKER-CATOOSA-DADE: Fred H. Simonton; WALTON: Lynn M. Huie; WARE: W. L. Pomeroy, Leo Smith; WARREN: H. B. Cason; WAYNE: J. W. Yeomans; WHITFIELD: Paul L. Bradley.

County Medical Societies not represented at this Second Session of the House of Delegates are as follows:

ALTAMAHA, BALDWIN, BARTOW, BEN HILL-IRWIN, BLUE RIDGE, BULLOCH-CANDLER-EVANS, BURKE, CARROLL-DOUGLAS-HARALSON, COFFEE, COWETA, DECATUR-SEMINOLE, DOUGHERTY, FLOYD, GRADY, HALL, JASPER, JENKINS, LAMAR, LAURENS, CRAWFORD W. LONG, MERIWETHER-HARRIS, MITCHELL, O-CONEE VALLEY, PEACH BELT, RABUN, RANDOLPH-TERRELL, SCREVEN, SOUTHEAST GEORGIA, SOUTHWEST GEORGIA, SUMTER, TAYLOR, TELFAIR, THOMAS-BROOKS, TIFT, TRI-COUNTY, UPSON, WASHINGTON, WILKES, WORTH.

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reports as introduced at this Session is listed here with the Reference Committee to which the report was referred.

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<i>Medical Civil Preparedness</i> —Edgar M. Dunstan, Atlanta, Chairman—Reference Committee No. 2	287
<i>Lectureship</i> —David Henry Poer, Atlanta, Chairman—Reference Committee No. 3	298
<i>Ministerial Liaison</i> —Needham B. Bateman, Atlanta, Chairman—Reference Committee No. 1	278
<i>Physician-Lawyer Liaison</i> —Hal M. Davison, Atlanta, Chairman—Reference Committee No. 5	316
<i>Eyecare of the Newborn</i> —J. Jack Stokes, Atlanta, Chairman—Reference Committee No. 2	288
<i>American Medical Education Foundation</i> — George T. Nicholson, Cornelia, Chairman— Reference Committee No. 4	309
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<i>School Child Health</i> —Thomas C. McPherson, Atlanta, Chairman—Reference Committee No. 5	319
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ALLIED REPORTS

<i>Headquarters Office</i> —Messrs. Milton D. Krueger and John F. Kiser, Atlanta—Reference Committee No. 3	299
<i>Journal of the Medical Association of Georgia</i> — Edgar Woody, Jr., and Miss Helen L. Hendry, Atlanta—Reference Committee No. 1	279
<i>Woman's Auxiliary to the Medical Association of Georgia</i> —Mrs. John L. Elliott, Savannah, President—Reference Committee No. 2	288

Report of Reference Committee No. 1

Charles T. Cowart, M.D., Chairman

(The following reports as presented to this reference committee are printed in full with the reference committee's recommendation and the action pursuant to it taken by the House of Delegates.)

Reference Committee No. 1 met at 8:00 a.m., April 28, 1958, Room 844, Hotel Dempsey, Macon, Georgia. Present were: Charles T. Cowart, La-Grange, Chairman; J. Hubert Milford, Hartwell, Vice-Chairman; Amey Chappell, Atlanta, Secretary; James H. Byram, Atlanta; Roy L. Denney, Carrollton; E. C. McMillan, Macon; C. A. Wilson, Brunswick; and, F. O. Garrison, Demorest.

President

W. BRUCE SCHAEFER, M.D., TOCCOA

1957 and 1958 have been very busy years for your president and administrative staff of the Medical Association of Georgia. The district societies are functioning well, the programs and social hours are unexcelled. It is the belief of the president that many papers of scientific interest are presented at these meetings that should be more widely disseminated over the state, and we think these papers should be submitted to the *Journal* for publication of the ones of general interest.

The officers, committees, and headquarters staff have worked untiringly this year. Some of the most important matters have been the establishment of a distinguished service award on the basis of service to our organization.

Of great importance is the physician and lawyer code of co-operation, which will be presented to the House of Delegates, and which I earnestly hope will be adopted.

Catastrophic hospital care for the MAG members has been well received, but it still does not have the coverage that it should have. I earnestly petition all members who have not joined up on the catastrophic hospital care to do so.

Compulsory medical school courses on the art and practice of medicine have been instigated and are now functioning, both in the University of Georgia and Emory University. The president feels that this is a step forward for the young students who are coming out.

The Council has petitioned the Workmen's Compensation Board to allow employees a choice of physicians by insisting that employers set up panels of at least three doctors in each area to choose from. This is in line with the American way of practice. We hope that it will be favorably considered by the Workmen's Compensation Board, and we hope that the House of Delegates will further put their stamp of approval on this.

Blood banks for state wide distribution and clearing and typing of blood have been worked on, and the committee is very active. I am certain that there will be an excellent report from the chairman of this committee, and we feel that it is very important that the House of Delegates approve their action.

The Medical Association of Georgia participated in the opening and dedication of the Crawford Long Memorial in Jefferson, Georgia, and I earnestly request all doctors of the state to visit and register. It is well worth your while, and the Medical Association of Georgia is supporting this to the tune of \$1,000.00 a year, which I hope will be continued.

The mental health program has been actively supported by your organization in their efforts to improve the mental health of Georgia, and has helped develop a movie of Milledgeville State Hospital for public education.

Medicare has been reorganized and is now functioning well and handling 2,200 claims per month. This is approximately five to six times of what we had anticipated at the start. It is hoped that the Medicare Program can be put on an indemnity plan instead of a full-service plan, which is more in line with our free enterprise system in the practice of medicine. The Medical Association of Georgia helped organize a twelve-state meeting on Medicare and Medicare problems, from which came the consensus of opinion that the indemnity plan is more compatible with our free enterprise system. Your president has worked closely with the Hospital Indigent Care Program, and takes this opportunity to advise all members to check with your county commissioners and see that your county will be able to participate in this program. We feel that it is a step forward in the care of our indigent patients.

Your president has functioned with the State Medical Education Board on placement of doctors and on allocating scholarships. In this committee, we feel that it is imperative that all of these men, as well as future doctors, intending to practice in Georgia, should be required to have at least one year's internship before being issued a license to practice. It is the recommendation of your president that the House of Delegates go on record as asking that a one year internship be required before a license to practice medicine in Georgia is given, and so instruct your legislative committee, so that next year definite legislation may be presented.

The Medical Association of Georgia has gone all out this year to renew efforts to effect closer liaison with the State Board of Medical Examiners, the State Medical Education Board, the State Board of Health, the Hospital Advisory Council, State Workmen's Compensation Board, Georgia Chamber of Commerce, Better Business Bureau, and the Regional Office of the American Red Cross.

We have worked diligently with the Governor's Nuclear Energy Commission and have endorsed courses in radioactive isotopes, and have appointed a special committee to study radiological safety in the state of Georgia.

Special committees have been appointed in school and child health, perinatal mortality, standardization of insurance forms, medical-legal liaison. These are all fields of endeavor which overlap in this rapidly moving age, and I would recommend their continuance.

The raise in dues last year has put your organization on a pay-as-you-go basis. I think now is the time for the members to begin to think about a permanent home. I hope this can be worked out to be put back of the Academy of Medicine. If so, I would recommend that the House of Delegates request donations from members who would be so inclined. We have all donated to permanent homes of some organization, mostly out of the state.

The Talmadge Hospital problem has been a source of considerable thought and conferences this past year. It is hoped by the time this is published it will be settled.

The status at the present time is that a committee from the Council on Medical Education from AMA will be in Georgia in April to investigate both sides and to help us come to a satisfactory conclusion. They are coming at the invitation of Richmond County, the Medical Association of Georgia, and the Medical College of Georgia.

The Council has met diligently and continues the policy of meeting over the state, which I think is good, and would recommend that in each section the council meets, that as many of the members of MAG that can attend these meetings do so.

I am grateful for the help each counselor has given me this year and especially the Executive Council consisting of Dr. George Dillinger, Dr. Hal Davison, Dr. J. G. McDaniel, and Dr. Chris McLoughlin. Dr. McLoughlin is the new secretary and has done a formidable job in this new position. To him I owe a great deal of thanks. Mr. Krueger and Mr. Kiser, along with Miss Franklin and Mr. Arndt, have been invaluable in their assistance. I hope everyone will read each committee's report and understand the mammoth amount of work these men have done. To each and all of you, you have my deepest thanks for your co-operation this year.

REFERENCE COMMITTEE RECOMMENDATION—The Reference Committee commends the President of the Medical Association of Georgia for his excellent work during the past year and recommends approval of his report. The Committee wishes to emphasize the following points in this report: (1) That the Medicare program be put on an indemnity plan instead of a full service plan, (2) That a one year internship be required before a license to practice medicine in Georgia is issued, (3) That the Workmen's Compensation Board allow employees a choice of physician, (4) That plans go forward, step by step, toward acquiring a permanent home for this Association.

HOUSE OF DELEGATES ACTION—Adopted the President's Report as recommended by the Reference Committee on motion duly made and seconded.

President-Elect

LEE HOWARD, SR., M.D., Savannah

Your President-Elect wishes to report that the past year has been one of continuous build-up in projects and achievements. During this time, due to the untiring efforts of Chris McLoughlin, his staff and committee, Medicare is now on a sound basis and running smoothly.

The work and achievements of our legislative committee have been outstanding.

Your President-Elect has attended all Council Meetings and all meetings of the executive committee of Council, which met every month except two. The President-Elect attended the Third District Meeting in Columbus and the Sixth District Meeting in Macon, and was the only MAG representative at the Macon meeting. The Columbus meeting was very good in every respect, well attended, with an interesting scientific program, followed by a wonderful dinner and entertainment at the Country Club.

A continuation of almost 100 per cent attendance at all council and executive committee meetings, has been maintained throughout the year, and no controversies have been entered into at this time.

REFERENCE COMMITTEE RECOMMENDATION—Approval of this report is recommended. The Committee commends the President-Elect for his work during the past year and wishes him a happy and successful year as President.

HOUSE OF DELEGATES ACTION—Adopted the President-Elect's report as recommended by the Reference Committee on motion duly made and seconded.

Immediate Past President

HAL M. DAVISON, M.D., Atlanta

The activities of your Immediate Past President for this year have been limited to participation in the meetings of the Executive Committee and of the Council, and by serving on such committees as he has been appointed on by these bodies.

As a matter of learning medicine and for the pleasure of association with the members, he has attended some of the district meetings.

While he realizes that no set rule can be made by the Medical Association of Georgia, once again he recommends that the district societies create as a part of their regular program, a report from the Medical Association of Georgia. He believes that this should take the place of first the report from the Councilor, who should discuss everything he desires. Second, there should come a short report, not enough to bother the program, from the President of the Association, from the Secretary of the Association, and from one of the Executive Secretaries. Properly arranged this can be done without upsetting the program and it does tend to keep all of the members of the district societies current with what is going on and to keep up their interest.

REFERENCE COMMITTEE RECOMMENDATION—Acceptance of this report is recommended. The Committee also recommends that a letter from the House of Delegates be sent to the family of Dr. Davison expressing sympathy and regret for his untimely death.

HOUSE OF DELEGATES ACTION—Adopted the Immediate Past President's report as recommended by the Reference Committee on motion duly made and seconded.

AMA Delegates

SPENCER KIRKLAND, M.D., Atlanta, C. H. RICHARDSON, M.D., Macon, EUSTACE ALLEN, M.D., Atlanta

Since the last meeting of the Medical Association of Georgia, there have been two meetings of the House of Delegates of the American Medical Association, one in New York City, June 3-7, 1957, and the other in Philadelphia, December 3-6, 1957.

The New York convention was the largest attended meeting in the one hundred ten year life of the American Medical Association. There were about 19,600 physicians registered and 192 members of the House of Delegates present.

In addition to considering sixty-six resolutions, this fine group of doctors elected eleven men to official positions. Dr. Gunner Gunderson, a sixty year old surgeon of La Crosse, Michigan, was elected President-Elect of the A.M.A. for the coming year. He will be installed president at the one hundred and seventh annual meeting to be held in San Francisco, next June. The names of the other officers elected will be published in the A.M.A. Journal.

The 1957 distinguished "Service Award" was voted to Dr. T. D. Spies, for his outstanding contributions to the science of human nutrition.

Mr. Henry Viscardi, a layman, was given a special citation for his outstanding service in human relations and welfare of disabled persons. Mr. Viscardi is founder

and president of Abilities, Inc., of West Hemstead, New York. He himself was born without legs.

The House of Delegates also cited the Parke-Davis Company, a Detroit pharmaceutical company for its series of *Institutional Messages* in national magazines, which tell the story of medicine and medical progress.

Some of the principle actions taken by the House of Delegates are as follows:

MEDICAL ETHICS

1. The House ratified by unanimous vote, a revision of the principles of *Medical Ethics* as drafted at the clinical session in Seattle, last November. We will give in this report only the controversial paragraphs that created such lengthy discussions.

"Section 6—A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgement and skill, or tend to cause a deterioration of the quality of medical care.

"Section 7—In the practice of medicine, a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of a patient. Drugs, remedies, or appliances may be dispensed or supplied by the physician, provided it is in the best interest of the patient.

"Section 10—The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and well-being of the individual and the community."

The House of Delegates voted approval of a resolution which provided, that in the states which have their own individual principles be binding upon all members of the state society or association, provided they are not inconsistent or in conflict with the Constitution or By-Laws of the American Medical Association. This resolution was sponsored by the New York delegation. New York has a more specific code of ethics than has the AMA, and thus they are in a position to enforce it as a result of the latest action.

CORPORATE PRACTICE OF MEDICINE

The House of Delegates agreed with the following statement of the committee: "Your Reference Committee is impressed by the necessity of informing all physicians and the general public as to the evil which may be inherent in the *Socialization of Medicine* through *Corporate Activity* as well as *Government Action*. In many of its forms it is indistinguishable in practice and in effect from *Socialized Medicine*, and appears to have embodied all of its evil. Your Reference Committee therefore recommends that this problem be referred to the Board of Trustees with the request that it devise and initiate a campaign to educate both physician and the general public as to the dangers inherent in the illegal corporate practice of medicine in its various forms."

MEDICAL CARE OF INDUSTRIAL WORKERS

The House of Delegates voted to accept, with revisions, a report made to the Board of Trustees by a joint A.M.A. committee on Medical Care of Industrial Workers. This report cited issues involving local medical associations and the United Miners Welfare fund.

The committee drew up "General Guides" governing responsibilities of both sides. While approving the report, the House of Delegates amended the "General Guides" so as to preserve not only free choice of hospital and physician by the patient but also to add two "fundamental concepts" as follows:

1—"Fee for service method of payment for physicians should be maintained except under unusual circumstances, these circumstances being determined to exist only after a conference of the liaison committee and representatives of the fund."

2—"The qualifications for physicians to be on the hospital staff, and membership on hospital staffs, is to be determined by local governing boards of the hospital and hospital staff."

SOCIAL SECURITY

Several resolutions were sent to the Reference Committee for action. The New York Delegation offered one calling for the extension of "the benefits of Social Security to self-employed doctors of medicine." This resolution was defeated.

The Connecticut Delegation introduced a similar resolution calling for compulsory inclusion of physicians under the Social Security law. It was voted down.

Three other resolutions supporting participation of physicians in pension plans for the self-employed, such as that advocated in Congress in the Jenkins-Keogh Bills were adopted.

MEDICARE

The House of Delegates recommended that the decision as to the type of contract, and whether or not a fixed schedule is included in future contracts, should be left to individual state determination, keeping in mind, the suggestions which oppose any fixed fee schedule.

The House also suggested that the A.M.A. attempt to have existing Medicare regulations amended to incorporate the Association's policy that the practice of anesthesiology, pathology, radiology, and physical medicine constitute the practice of medicine, and that fees for services by physicians in these specialties should be paid to the physician rendering the services.

The Delegates then adopted a resolution condemning Medicare payment to or on behalf of any resident, fellow, intern, or other house officer in similar status who is participating in a training program.

MEDICAL EDUCATION

No rigid curriculum can be prescribed for accomplishing the objectives of medical education. It is the responsibility of the faculty of each school to re-evaluate its curriculum and to provide, in accordance with its own particular setting and needs and in recognition of advances in the sciences to provide a sound and well integrated educational program.

MISCELLANEOUS ACTION

In considering sixty-six resolutions and many additional reports from the Board of Trustees, councils, and committees, the House also:

Congratulated the Board and the Committee on Poliomyelitis for their prompt action in stimulating national interest in the polio immunization program;

Recommended further study and a progressive program of action, probably including legislative changes, to solve the problem of *narcotic addiction*;

Urged a more careful screening of television and radio patent medicine advertising;

Directed the Board of Trustees to investigate the indiscriminate use of stimulants such as *amphetamine*, particularly in relation to athletic programs;

Directed the Speaker to appoint a committee of five House members to study the *Heller Report*, a management survey of the Association's organizational mechanisms;

Opposed the establishment of any further *veterans'* facilities for the care of non-service-connected illness of veterans;

Condemned the compulsory assessment of medical men and staff members by hospitals in fund-raising campaigns;

Commended the television program, "Dr. Hudson's Secret Journal," its producers and its star, Mr. John Howard, for an outstanding contribution to the public interest and welfare, and

Recommended payment of transportation expenses of *Section Secretaries* for AMA meetings which they are required to attend.

OPENING SESSION

At the Monday opening session Dr. Dwight Murray, retiring AMA President, stressed the triple theme of the personal touch in medicine, the necessity for freedom in medical practice and the need for professional unity. Dr. Allman, then President-Elect, warned against the dangers of third-part contractual agreements involving fixed fee schedules. The Goldberger award in nutrition research was presented to Dr. P. Gyorgy of Philadelphia. An AMA citation was awarded to the Parke-Davis Company for its continuing series of institutional advertisements telling the story of medicine and medical progress. Dr. H. G. Weiskotten, who retired after many years as chairman of the Council on Medical Education and Hospitals, received two bound volumes of letters in appreciation and also an ovation from the House of Delegates.

INAUGURAL CEREMONY

Dr. Allman, in his Tuesday night inaugural address, declared that the physician is constantly striving for a balance between personal human values, scientific realities, and the inevitabilities of God's will. The inaugural ceremony, which was telecast over Station WABD-TV in New York, included presentation of the Distinguished Service Award to Dr. Spies and the special layman's citation to Mr. Viscardi. Also taking part in the program was the United States Army Chorus of Washington, D. C.

REPORT OF ACTIONS OF THE HOUSE OF DELEGATES AMERICAN MEDICAL ASSOCIATION ELEVENTH CLINICAL MEETING DECEMBER 3-6, 1957 Philadelphia

The American Medical Association Clinical Session was held in Philadelphia, December 3-6, 1957. In spite of inclement weather, about 2,637 physicians were registered. The two hundred or more Delegates present considered twenty-seven resolutions and more than a

dozen reports of the various AMA Councils and Committees.

The annual reward for the "General Practitioner of the Year" went to Dr. Cecil W. Clark, a thirty-three year old country doctor from Cameron, Louisiana, who last June labored for three days and nights ministering to the needs of Hurricane Audrey's victims. Dr. Clark treated the injured despite a deep personal loss. Three of his five children were among the more than five hundred that were lost.

Dr. David B. Allman, President of the A.M.A., told the delegates at the opening session, that the proposed legislation introduced by U. S. Congressman Forand, democrat from Rhode Island, is at least nine parts evil to one part sincerity. He branded the bill as "Socialized Medicine." He stated that it is the beginning of the end of the private practice of medicine. The House of Delegates condemned the Forand Bill as undesirable legislation. Dr. Allman stated that the positive approach for combating the Bill is that of Voluntary Health Insurance Plans which are proving very successful and are becoming increasingly more so. The Board of Trustees has appointed a special task force to help defeat the bill.

After lengthy reference committee hearings and floor discussions, the House voted that fluoridation of public water supplies is a safe and practical method of reducing the dental caries during childhood.

FREE CHOICE OF PHYSICIANS

Acting on the issue of "Free Choice" in relation to contract practice, the House passed a resolution which reaffirmed approval of previous interpretations of the Principles of Medical Ethics by the Association's Judicial Council and directed that they be called to the attention of all constituent associations and component societies. One Council opinion, issued in 1927 and reaffirmed in Philadelphia, stated that the contract practice of medicine would be determined to be unethical if a "reasonable degree of free choice of physician is denied those cared for in a community where other component physicians are readily available." The resolution also cited a Council opinion, published in the October 19, 1957, issue of the A.M.A. Journal which stated that the basic ethical concepts in both the 1955 and '57 edition of the Principles of Medical Ethics are identical in spite of changes in format and wording. This opinion added that, "No opinion or report of the Council interpreting these basic principles which were in effect at the time of the revision has been rescinded by the adoption of the 1957 principles."

The 1957 Council report also pointed out that, "There are many conditions under which contract practice is the only legitimate and ethical and in fact the only way in which competent medical service can be provided."

Judgment of whether or not a contract is ethical, the report said, must be based on the form and terms of the contract as well as the circumstances under which it is made.

In another action related to the issue of free choice, the House adopted a resolution condemning the current attitude and method of operation of the United Mine Workers of America Welfare and Retirement Fund, as tending to lower the quality and availability of medical and hospital care to its beneficiaries. The resolution

called for a broad educational program to inform the general public, including the beneficiaries of the fund, concerning the benefits to be derived from preservation of the American right of freedom of choice of physicians and hospitals as well as observance of the "Guides to Relationships Between State and County Medical Societies and the UMWA Welfare and Retirement Fund," which were adopted by the House last June.

THE HELLER REPORT

Acting on the report of the committee to study the Heller Report on organization of the American Medical Association, the House reached the following decisions on ten specific recommendations:

1. The office of Vice-President will be continued as an elected office.

2. The office of Secretary and Treasurer will be combined into one office to be known as Secretary-Treasurer and that officer will be selected by the Board of Trustees from one of its number.

3. The duties of the Secretary-Treasurer will be separated from those of the Executive Vice-President.

4. The office of General Manager will be discontinued and the new office of Executive Vice-President will be established. The latter, appointed by the Board of Trustees, will be the chief staff executive of the association.

5. The Council on Medical Education and Hospitals and the Council on Medical Service will be continued as standing committees of the House of Delegates but their administrative direction will be vested in the Executive Vice-President.

6. The voting members of the Board of Trustees will be limited to eleven: The nine elected Trustees, the President and the President-Elect. The Vice-President, the Speaker, and the Vice-Speaker of the House of Delegates will attend all Board Meetings including Executive Sessions with the right of discussion, but without the right to vote.

7. The House disapproved of the proposal to elect the Trustees from each of the nine physician-population regions.

8. The office of Assistant Secretary will be discontinued and a new office of Assistant Executive Vice-President will be established.

9. The Committee on Federal Medical Services will be retained as a Committee of the Council on Medical Service and will not become a part of the Council on National Defense.

10. The Speaker of the House will appoint a joint and continuing Committee of six members, three from the Board of Trustees and three from the House, to redefine the central concept of the AMA objectives and basic programs, to consider the placing of greater emphasis on scientific activities; to take the lead in creating more cohesion among National Medical Societies, and to study social-economic problems.

The accepted recommendations were referred to the Council on Constitution and By-Laws, with a request to draft appropriate amendments for consideration by the House at the 1958 annual meeting in San Francisco.

HEALTH PROGRAMS FOR HOSPITAL EMPLOYEES

A set of "Guiding Principles for an Occupational

Health Program in a Hospital Employee Group" was approved by the House. The Guides were developed by a joint committee of the AMA and the American Hospital Association and already had been approved of formally by the AHA. They include these statements:

"Employees in hospitals are entitled to the same benefits in health maintenance and protection as are industrial employees, therefore programs of health services in hospitals should use the techniques of preventive medicine which have been found by experience in industry to approach constructively the health requirements of employees."

"It is essential that employee health programs in hospitals, as in industry, be established as separate functions with independent facilities and personnel. The fact that hospitals are engaged in the care of the sick as their primary function does not alter the necessary organizational plan for an effective occupational health program.

ASIAN INFLUENZA VACCINE

The House considered three resolutions dealing with the Asian influenza immunization program and then adopted a substitute resolution calling attention to "Certain inadequacies and confusions in the distribution of vaccines and directing the Board of Trustees to seek conferences, through existing committees, with a view to establishing a code of practices regulating the future distribution of important therapeutic products, so that the best interest of all the people may be served." The resolution pointed out that the A.M.A. already has a joint committee with the American Pharmaceutical Association and the National Association of Retail Druggists, in addition to a liaison committee with the Drug Manufacturers Association.

MEDICAL RATING OF PHYSICAL IMPAIRMENT

The House accepted a 115-page "Guide to evaluation of permanent impairment of the extremities and back," which was developed by the Committee on Medical Rating of Physical Impairment, as the first in a projected series of Guides. The Delegates commended the Committee for doing a "superb job on this difficult subject and expressed pleasure that the guides will be published in the *Journal of the American Medical Association*. The guides are expected to be of particular help to physicians in determining impairment under the new disability benefits program of the Social Security Act.

MISCELLANEOUS ACTIONS

Among a wide variety of other actions, the House also:

Directed that a new committee be established in the Council on Industrial Health to study *neurological disorders in industry*;

Noted with approval the establishment of the American Medical Research Foundation, which will initiate and encourage necessary *medical research* and correlate and disseminate the results of studies already under way;

Decided that informational materials which are sent to the AMA Delegates should also be sent to the *alternate delegates*;

Affirmed that it is within the limits of ethical propriety for physicians to join together as partnerships, associations, or other *lawful groups* provided that the ownership and management of the affairs thereof remain in the hands of licensed physicians;

Instructed that the appropriate committee or council should engage in conference with *third parties* to develop principles and policies which may be applied to the relationship between third parties and members of the medical profession;

Urged state medical society committees on aging and insurance, to make continuing studies for *pre-retirement financing of health insurance* for retired persons;

Endorsed a suggestion that the committee on Federal Medical Services sponsor a national conference on *veterans' medical care* during 1958;

Asked the Board of Trustees to study the feasibility of having the association finance a thorough investigation of the Social Security System by a qualified private agency;

Suggested that physicians and their friends make a vigorous effort to obtain congressional enactment of the Jenkins-Keogh Bill;

Approved the "Suggested Guides to Relationships Between Medical Societies and Voluntary Health Agencies,"

Strongly recommended that a completely adequate and competent medical department be established in the *Civil Aeronautics Administration* directly responsible to the CAA Administrator, and

Congratulated the General Electric Company for its medical television presentations on the subject of *quackery*.

At the Tuesday opening session, Rear Admiral B. W. Hogan, Surgeon General of the U. S. Navy, presented the Navy Meritorious Public Service Citation to Dr. Dwight H. Murray of Napa, California, immediate past president of the Association. Contributions to the American Medical Education Foundation, for financial aid to the nation's medical schools, were presented by four state medical societies: California, \$143,043.25; Utah \$10,390; New Jersey, \$10,000 and Arizona, \$8,040. The Interstate Postgraduate Medical Association of North America gave \$1,000 and the Illinois State Medical Society announced that it was adding \$10,000 to the \$170,450 presented at the New York meeting last June.

REFERENCE COMMITTEE RECOMMENDATION—The Committee congratulates the AMA Delegates on this excellent report and commends them for their good work and recommends approval of the report. The Committee, in accordance with this report, makes the following recommendations: (1) That further pressure be put on Congress for the passage of the Jenkins-Keogh Bill, (2) That need for continuing screening of TV and radio programs on a national level be recognized, (3) That contributions to medical education by county, district, and state associations, as well as individuals, be urged, (4) That realizing evils of the Forand Bill, every effort be made to defeat it, (5) That it be noted that the House of Delegates of the AMA has approved the fluoridation of the public water supply.

HOUSE OF DELEGATES ACTION—Adopted the report of the AMA Delegates as recommended by the Reference Committee on motion duly made and seconded.

SEVENTH DISTRICT COUNCILOR

D. LLOYD WOOD, M.D., Dalton

The seventh district had an excellent meeting in the fall at Cartersville, Georgia. An excellent scientific program was given, followed by a social hour and dinner at the country club.

It seems that the doctors of the Seventh District are doing an excellent job professionally in their care of the

people. New doctors are continually coming into the district, and the membership in the district society, state association, and AMA has increased in the past year.

There are still some areas in the district that would be more adequately covered by having more doctors.

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Bartow				
V. Hamilton Maley,				
Cartersville	9	6	9	6
Carroll-Douglas-Haralson				
H. L. Barber,				
Carrollton	34	18	33	19
Chattooga				
Wm. B. Thompson,				
Summerville	7	6	6	6
Cobb				
Fred Schmidt,				
Marietta	70	64	59	50
Floyd				
John D. Tate, Rome .	57	46	56	49
Gordon				
Byron B. Steele,				
Fairmont	11	8	11	9
Polk				
John McGehee,				
Cedartown	14	10	13	9
Walker-Catoosa-Dade				
E. M. Townsend,				
Ringgold	32	22	28	18
Whitfield				
Jas A. Redfern,				
Dalton	29	21	27	15
	263	201	242	181

REFERENCE COMMITTEE RECOMMENDATION—The Reference Committee recommends approval of this report.

HOUSE OF DELEGATES ACTION—Adopted the Seventh District Councilor's report as recommended by the Reference Committee on motion duly made and seconded.

EIGHTH DISTRICT COUNCILOR

F. G. ELDRIDGE, M.D., Valdosta

The councilor of the Eighth District was present at all meetings of council except the September 1957 meeting which was missed as a result of illness of Mrs. Eldridge.

It is a privilege to serve the Eighth District as Councilor in the Council of the Medical Association of Georgia.

EIGHTH DISTRICT VICE-COUNCILOR

JAMES M. HICKS, M.D., Brunswick

(1) We were hosts to the Eighth District Medical Society, on Jekyll Island.

(2) We are now accredited by the American Hospital Association.

(3) We have added open cardiac surgery to our list of services.

(4) Broncho-esophagoscolic examination and treatment program is being broadened.

(5) An Electro-encephalogram is now in use.

(6) Our disaster program has been perfected.

(7) We are working toward securing a local Blood Bank.

(8) Our hospital bed capacity and surgical suites are soon to be doubled.

(9) We are proud to announce the addition of these seven physicians to our staff (making the total 42): Benjamin Addison, Thomas Daves, Ben Galloway, Bill Greco, Ted Haywood, Carl Lupo and, Milledge Smith.

REFERENCE COMMITTEE RECOMMENDATION — Recommends approval of these reports.

HOUSE OF DELEGATES ACTION—Adopted the Eighth District Councilor and Vice-Councilor reports as recommended by the Reference Committee on motion duly made and seconded.

NINTH DISTRICT COUNCILOR

CHARLES R. ANDREWS, JR., Canton

The Ninth District Medical Society continues as a strong well-functioning organization holding two meetings each year, one in April and the other in September. These meetings are always well-arranged with excellent scientific programs, and interest by members in the Ninth District Society is evidenced by representative attendance by members throughout the district. Membership in the Ninth District is good and has remained essentially the same on the MAG and AMA levels. We feel that it has been a very good move in the forming of the Chattahoochee Society by combining Forsyth and Gwinett Counties. There are perhaps one or two other areas in the district which might take similar steps and thereby further strengthen the organization.

All of the administrative council meetings have had Ninth District representation, and our Vice-Councilor Dr. Paul Scoggins of Commerce has taken a most active interest in attending all of the council meetings. In this he has set an excellent example for other vice-councilors throughout the state.

The Ninth District has been instrumental in starting meetings of the Liaison Committee between the MAG and the State Department of VFW to discuss supposed differences which might exist in the attitudes of the medical and veterans organizations. It is hoped that some positive statements will result from these meetings which may be far reaching and beneficial to all concerned.

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Blue Ridge				
Thos. J. Hicks,				
McCaysville	10	9	11	9
Chattahoochee				
Fayette Sims,				
Lawrenceville	16	12	17	12
Cherokee-Pickens				
E. A. Roper,				
Jasper	13	10	14	10
Habersham				
T. N. Lumsden,				
Clarksville	15	14	16	14
Hall				
Hamil Murray,				
Gainesville	43	36	40	32

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Jackson-Barrow				
A. A. Rogers, Jr., Commerce	16	11	18	12
Rabun				
J. C. Dover, Clayton	4	4	2	2
Stephens				
C. L. Ayers, Toccoa	15	12	15	11
	132	108	133	102
Banks	—	—	1	1
			—	—
			134	103

REFERENCE COMMITTEE RECOMMENDATION — Recommends acceptance and approval of this report.

HOUSE OF DELEGATES ACTION—Adopted the report of the Ninth District Councilor on motion duly made and seconded.

Legislation

J. FRANK WALKER, M.D., *Chairman*

For the past four years your Committee has been actively engaged in maintaining a close liaison with the members of the General Assembly, and 1958 has been no exception. In 1955 your Committee urged defeat of two measures extending unlimited practice privileges to osteopaths and naturopaths. In 1956, the Association was responsible for passage of the act repealing the 1950 Naturopath Law. In 1957, the Association co-sponsored with the Board of Medical Examiners broad amendments to the medical practice act providing greater disciplinary powers for the Board.

In 1958, the MAG did not sponsor any specific legislation although your Committee assisted other groups in support of the mental health bills and the measure to curb quickie marriages in Georgia. Our "Bulletin on Health and Medical Legislation" was mailed weekly throughout the six week session, and we attempted to keep the members informed on all measures in any way related to health and medical matters.

Two identical Osteopath-sponsored bills were introduced but failed to pass. One was in the Senate and later one was introduced in the House after the Senate Bill was killed in the Committee. These measures would have permitted D.O.'s full medical practice privileges in Georgia, and your Committee backed by Council opposed these bills on the grounds that they would lower medical standards in the state.

Our Committee work this year was greatly enhanced by the presence of four M.D.'s in the Senate. These men gave invaluable service in representing the profession and the general public in health and medical matters. MAG Council at its March meeting voted on the recommendation of the Committee on Legislation to award these four physician-senators Certificates of Appreciation for their outstanding work. Our thanks again to Senators Marcus Mashburn, Cumming; H. M. Edge, Blairsville; C. J. Roper, Jasper; and Frank P. Holder, Eastman.

The cooperation of physicians throughout the state this year was very gratifying and we want to thank all

of those who assisted the MAG Committee on Legislation. Our thanks to Mrs. Ruth Inglis of Marietta, Chairman of the Woman's Auxiliary Committee on Legislation and her many cohorts. We are particularly indebted to the ten district keymen, all of whom did an outstanding job. Their names and districts are as follows: (1) Albert M. Deal, Statesboro; (2) T. E. DuPree, Bainbridge; (3) Robert C. Pendergrass, Americus; (4) Virgil Williams, Griffin; (5) Tom Florence, Atlanta; (6) John Bell, Dublin; (7) R. D. Walter, Calhoun; (8) Joe Mercer, Brunswick (9) Rafe Banks, Gainesville; (10) John B. O'Neal, Elberton. Our thanks also to President Bruce Schaefer and Vice-President T. A. Peterson for their able assistance. That the distinguished work of Mr. John Kiser accounts in great measure for the success of this committee hardly needs repeating.

National Legislation: Committee Vice-Chairman Eustace Allen has been in charge of national legislative affairs and has been quite active. Considerable material in regard to the Forand Bill has been published in the *Journal* and reported to the members. Dr. Allen has kept the Council informed on national legislation and has maintained close liaison with the AMA Committee on Legislation. A meeting on the Forand Bill was held in February with Mr. Aubrey Gates of the AMA staff.

The Committee plans to become more active in national legislative matters now that the Georgia General Assembly is adjourned.

Recommendations: (1) We wish to recommend that physicians throughout the state take a more active interest in civic affairs and assume more of the responsibilities and obligations of active citizenship. Government begins at a local level, and you can be most helpful to your profession and the public by participating in the affairs of your community.

(2) MAG Council is urged to study and formalize policy statements on national legislation so that our congressmen and senators can be informed of our views in Georgia.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee approves this report and commends this committee for its active and aggressive work.

HOUSE OF DELEGATES ACTION—Adopted the Legislation Committee report as recommended by the Reference Committee on motion duly made and seconded.

Blood Banks

LESTER FORBES, M.D., *Chairman*

The Blood Banks Committee set forth the program in the fall of 1957 that the newly formed organization of the Georgia Association of Blood Banks be the organization through which the Medical Association of Georgia would mediate the formation of an adequate blood transfusion service throughout the state of Georgia, and that through the Special Committee on Blood Banking, sponsor a joint meeting with the Georgia Public Health and the Georgia Association of Blood Banks, including a Blood Bank Seminar, with guest speakers and technical demonstrations to further the program of the Georgia Association of Blood Banks. On February 22, 1958, at the St. Joseph's Infirmary, Atlanta, Georgia, such a meeting was held with Dr. Jack Griffiths of Miami as guest speaker, and Dr.

Walter Sheppard and Dr. Val Hastings representing the Georgia Association of Blood Banks. The morning session was devoted to administrative problems of community blood banks, hospital blood banks and the establishment of a clearing house program for Georgia. Attendance at this program included sixty technologists and physicians. The afternoon session was devoted to demonstrations of techniques, particularly aimed at medical technologists, in the accepted manner of cross-matching, typing, and some special procedures concerned with blood banking. The meeting met with enthusiasm and several applications were received for the Georgia Association of Blood Banks. It is contemplated that this meeting may well have initiated a working program for the Georgia Association of Blood Banks. Despite the apparent initial success of this program, it is necessary that a continued interest and continued activation of this committee be carried on for several years.

The chairman of the committee believes that formation of a program similar to that in Florida should be established throughout the state of Georgia. The Georgia Association of Blood Banks is the organization through which such a program can be established. A clearing house program makes it possible for blood credits to be exchanged and blood to be shipped through all the accredited blood banks throughout the state. This has worked well through the state of Florida and through the Southeastern clearing house; this service actually may be extended to a nation wide program. This enables a smaller community to have the benefits of the entire state for obtaining special blood types and also the exchange of blood credits of individuals from one community to another.

Medical technologists and physicians attended this initial meeting of the Georgia Association of Blood Banks, but hospital administrators and interested community groups were absent. It is proposed that another such meeting be held soon, aimed specifically at these individuals, to enlist their interest in the program.

The second facet of the program, education in blood banking techniques, is a more difficult problem. It is hoped that the Georgia Association of Blood Banks and the Public Health Department can hold several clinics throughout the state. Continued support by the Medical Association of Georgia is needed in this program.

It may be necessary for the Medical Association of Georgia to aid financially in this for the next several years, as such a program must, of necessity, move slowly as education must come before service can be rendered.

The Blood Banks Committee has in the past accomplished several very noteworthy advances in the establishment of minimum standards for blood banking in the state of Georgia which were accepted by the Medical Association of Georgia Council, and it is hoped that the committee may remain active and further the advancement of blood banking in the state of Georgia.

Ministerial Liaison

NEEDHAM B. BATEMAN, M.D., *Chairman*

(1) The major organizations of ministers of the different denominations throughout the state have been notified of the existence of this committee and advised briefly as to its function and aims. The officers and leaders of these ministerial organizations have responded in a manner that indicated they personally were very pleased to know that the Medical Association of Georgia had seen fit to appoint such a committee, and have volunteered to inform their membership about the committee.

(2) Physician speakers have been supplied on special occasions in answer to requests from ministers and minister organizations in about two dozen instances. Each time, the physician speaking as requested has reported that he was well received, and his presence obviously appreciated. The ministers are always very keenly interested in learning from the physician more about how to handle their problem people; how to counsel with them; how to work with the individual's personal physician; and how when necessary to obtain a physician where none has been in attendance. It appears to be the unanimous opinion of the ministers that the family or personal physician is the doctor that can best serve the patient and work with him and his minister. They also agree that the family doctor is the one to advise about consultation with specialists and when indicated, select such specialists as the individual may require.

(3) On invitation, physicians together with a number of outstanding ministers, spoke to a large group of preachers that met at Camp Glisson for three days last fall to study and discuss "Counselling" as required of the church pastor in his every day work. This meeting was sponsored by the North Georgia Methodist Conference but was attended by ministers of several denominations from all over Georgia as well as many lay church workers and officials.

Any one seeing the eagerness and sincerity of these fine people to learn more of what every physician knows about people and how to help them would be more than willing to serve on this committee and to give of his time to help our church people in their work. They want to work with the medical profession; they want to learn from the members of our profession.

(4) The aims and function of the Ministerial Liaison Committee are:

a. Create a better understanding between the Ministerial and Medical Professions and to bring about closer cooperation between the two groups and their individual members.

b. To place the medical profession and the individual physician in a better light in the eyes of the clergy, the public at large, and of course the patient and his family and friends by letting them see for themselves the sincere desire of the Men of Medicine to serve and fulfill their duty to their profession and their fellow-men.

c. To help our physicians realize that others, especially the ministers, are dedicated to duty and to service, and that they have arduous and long hours often under adverse circumstances the same as the doctor; that they are often imposed upon by scheming and unscrupulous persons, and are frequently called on to

REFERENCE COMMITTEE RECOMMENDATION—This report is approved. Its adoption is urged.

HOUSE OF DELEGATES ACTION—Adopted the Special Committee on Blood Banks report as recommended by the Reference Committee on motion duly made and seconded.

work with the confused, the frustrated, the inadequate, the immature, the emotionally disturbed, the physically sick, the unloved, the unwanted, and the unfortunate the same as the doctor.

d. To acquaint the members of the two professions with the many ways they can work with each other to great advantage where individuals, families, communities, and peoples are concerned.

e. To point out to ministers and their organizations how easy it is to secure doctors as speakers, members of panels, committees, etc., when the help or opinion of one trained and experienced in medicine is desired.

f. To remind the doctors and his organizations of the willingness of the minister and his organizations to work with the members and groups of the medical profession; of their understanding of us and our common problems; their readiness to join with us when invited, in any worthwhile meeting or undertaking.

g. To encourage physicians and physician organizations to work with the ministers, churches, civic groups, etc., for the benefit of the community and the public as a whole.

h. To encourage each County Medical Society to appoint a Ministerial Liaison Committee.

i. To tactfully suggest that our ministerial organizations on state, county, and city levels appoint Medical Liaison Committees to work along the line of this committee from their end of the row.

j. To strive to keep all of this activity on the local level; that is if a county ministerial group or church asks for a speaker or representative from the medical profession, that this request be filled through the local county ministerial committee who calls on a local physician to fulfill this assignment. A local physician can do a better job in such cases and of course will be much more appreciated than some one from afar just there for the occasion.

k. To accept our duties as they come, giving of our time, strength, ability, and resources as they require.

l. To be careful not to trespass on the territory of any other Medical Association of Georgia group or committee and also being sure not to accept any duty that could more properly be handled by the officials or any other committee of the Medical Association of Georgia.

REFERENCE COMMITTEE RECOMMENDATION—The acceptance of this report is recommended. The Reference Committee commends this special committee for its excellent work. The importance of Ministerial Liaison report as recommended by the Reference Com-

HOUSE OF DELEGATES ACTION—Adopted the Special Committee on Ministerial Liaison report as recommended by the Reference Committee on motion duly made and seconded.

The Journal

EDGAR WOODY, JR., M.D., *Editor*

MISS HELEN L. HENDRY, *Managing Editor*

The 1957-58 report of the *Journal of the Medical Association of Georgia* is submitted herewith:

Personnel—Miss Frances H. Porcher, Managing Editor of the *Journal* submitted her resignation in June of 1957 to accept a position with the *National Geographic Magazine* in Washington, D. C. Her departure from the *Journal* was much regretted because of the fine record which she established as Managing Editor during the previous three years. After screening scores of applicants, a suitable replacement was

found for the position of Managing Editor. She is Miss Helen Hendry, a 1957 graduate of Agnes Scott College and a native of Perry, Florida. The *Journal* office has continued to function smoothly under her direction.

During the past twelve months Dr. Henry H. Tift of Macon, Georgia, has submitted his resignation as a Contributing Editor. His contributions will be missed by the *Journal*. There have been no other changes in the staff of Contributing Editors. Our active contributors are as follows: Dr. Herbert S. Alden, Atlanta; Dr. Thomas Findley, Augusta; Dr. J. Willis Hurst, Atlanta; Dr. Charles S. Jones, Atlanta; Dr. Arthur M. Knight, Jr., Waycross; Dr. Arthur J. Merrill, Atlanta; Dr. Lester Rumble, Jr., Atlanta; Dr. Peter L. Scardino, Savannah; Dr. Patrick C. Shea, Jr., Atlanta; Dr. Robert H. Vaughn, Columbus.

Mr. John Stewart McKenzie continues active in his role of typography consultant to the *Journal*. The invaluable contributions of Ted F. Leigh, Emory University, Photography Editor, have continued to enhance the attractiveness of the *Journal* covers. The financial affairs continue to be handled very capably by Miss Thelma Franklin.

Conference—In November of 1957, the *Journal of the Medical Association of Georgia* was represented at the State Journal Advertising Bureau Conference in Chicago by the Editor and Managing Editor. This meeting is sponsored every other year by S.J.A.B. and as in past years, proved very stimulating and valuable. The two-day program was especially beneficial for Miss Hendry who had just recently assumed her new duties as Managing Editor. At this meeting, Edgar Woody, Jr., Editor, was elected a member of the Medical Advisory Committee for the State Journal Advertising Bureau to serve for a term of five years. This Committee meets twice yearly at the meetings of the American Medical Association.

Appointment—In December of 1957, Edgar Woody, Jr., Editor, was appointed to the Advisory Board of the American Medical Writers Association. This organization is made up of medical editors and editorial personnel from all over the country. Their meetings are held yearly.

Southeastern State Medical Journal Conference—Because of the enthusiasm expressed by the editors following the Regional State Journal Conference held in Atlanta, November 3-4, 1956, it has been decided to continue this series on an every-other-yearly basis. At the request of the Texas State Journal, the second such meeting will be held in Austin, Texas, in November of 1958. A good attendance at this conference is anticipated.

Content—There have been several minor changes in the content of the *Journal* over the past year but no drastic departure from the norm.

There has been a noticeable increase in the size of the *Journal* because of the addition of an extra scientific article each month. This increase was felt to be necessary in order to balance the editorial matter with the increased advertising.

The *Journal* continues to feature special pages such as the Heart Page and President's Page, and plans are being made to reinstitute a Cancer Page to be published as often as possible.

Brief summaries now precede all scientific articles.

These are written by the editor, and are included to aid the reader in the selection of articles most beneficial to him.

On the Physicians Bookshelf Page, a statement is now made to the effect that all books received in the Journal office will be listed under the "Books Received" column and will be reviewed at the discretion of the editor.

Minor changes were made in the contents of the 1958 roster. Most of these had to do with the arrangement of material.

Format and Typography—Under the direction of John S. McKenzie, Higgins McArthur Printing Company, The Journal has undergone many improvements in over all appearance.

Headings of scientific articles were changed from the old Garmon Bold Display type to 20th Century Bold Condensed type. The summaries were added in Spartan Medium italics.

In articles without illustrations, bold face sub-headings are used to break the monotonous gray look and to give a more pleasing appearance to the page.

The heading on the feature departments (Physicians Bookshelf, Abstracts, Heart Page, etc.) have been restyled with art work and hand lettering relating to the type style on the cover.

The Journal now adheres to a more consistent style in the placing of the cutlines of illustrations. These are placed under the illustrations and are placed flush left rather than indented.

Subtle changes were made on the contents page to give it a cleaner, more attractive appearance.

To indicate the continuation of an article, each left hand page of the article is headed by a bold face line giving the name of the paper and the last name of the first author. Unless absolutely necessary, no continuation lines are placed at the bottom of the page.

An attempt is being made to include more illustrations in the Association department to add to the over all appearance as well as to give a more personal touch.

On the cover, two major changes were made. The black type is now set in 20th Century Bold type to tie in with the rest of the magazine, and the date line has been relocated in a more readable position. Dr. Leigh has received many compliments for his work, and it is felt that his cover illustrations are a great asset to the Journal.

Several noteworthy changes were made in the appearance of the 1958 roster. Most noticeable of these are (1) The cover was redesigned to give it a cleaner more modern look; (2) Side stitching was used in binding the bulletin rather than saddle stitching; (3) The alphabetical listing was printed on yellow, thicker stock to separate it from the component society roster, thus facilitating use of the roster; and (4) Changes in the typography were made to make the roster as consistent as possible with the Journal.

The changes which have been made in the typography and format of the Journal were felt to be necessary to maintain its standing in ranks of medical Journals. In general the idea behind these improvements was to keep the Journal of the Medical Association of Georgia in step with the modern trend of journalism, striving toward simplicity and neatness with a journal in which

the format and typography would enhance rather than hinder readability.

Equipment—The Polaroid Land Camera purchased by Council for the Journal office has become increasingly more useful in obtaining photographs of meetings and other Association activities for publication. It is anticipated that the camera will be used to an even greater extent in the future.

Summary—Following a previous recommendation by Council that a readership survey be carried out by a professional survey taker, the Journal has completed a limited mail survey with the aid of the State Medical Journal Advertising Bureau. It was felt that a mail survey could be as effective as one taken by a professional surveyer, and a more extensive survey is planned for the future. The results of the poll taken in September were very favorable, and it was learned that MAG members were especially interested in the activities of other members. Several requests were received for a series of articles on doctor's hobbies.

We have been gratified in the past year to have been quoted and to have entire articles reprinted by other medical publications. We continue to receive numerous requests for reprints from individuals as well.

The staff is continuing to look for ways to manage the affairs of the Journal in as smooth and efficient manner as possible. At the present time an effort is being made to improve the method of distributing books for the book reviews as well as the quality of the reviews.

Recommendations—It is recommended that several items be purchased for use in the Journal office.

(1) A small filing cabinet is needed for the major purpose of keeping advertising correspondence, insertion orders, and plates, if necessary. It is felt that such a file would help to establish a more efficient system for managing advertising.

(2) An unabridged dictionary is especially requested for use in proofreading and for general reference.

(3) A new table is requested to replace the one now used to hold state journals. The latter is not the property of the Association and will be claimed by its owner in the near future.

Financial—The Journal continues to sustain its printing costs with advertising revenue, and additional expenses are borne by subscription income. This is felt to be a favorable balance for any non-profit medical publication.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 1 compliments the Journal Staff for its work and the favorable changes which have been made in the Journal. Approval of the entire project is recommended.

HOUSE OF DELEGATES ACTION—Adopted the report of the Journal as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 8

Ethics

GLYNN COUNTY MEDICAL SOCIETY DELEGATION

WHEREAS, in recent years there have been many articles in the lay press which have proven detrimental to the practice of medicine as a profession, and

WHEREAS, much of this detrimental material originated with members of the profession, and

WHEREAS, such releases to the lay press were made

without seeking recourse through usual medical channels

NOW THEREFORE BE IT RESOLVED that the Medical Association of Georgia condemns such action and directs its Delegates to the American Medical Association to introduce proper resolutions in the American Medical Association House of Delegates condemning such action as unethical and calling for investigation by the Ethics Committee of such members of the profession who may be involved in such releases or quotations.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 1 rejects this resolution as written. It recommends that the final paragraph be reworded as follows:

"Now therefore be it resolved that all medical articles to be printed by the lay press conform to the Code of Ethics of the AMA. If not, the author may be subject to censure by his local county medical society or the Professional Conduct Committee of the MAG."

HOUSE OF DELEGATES ACTION—Adopted Resolution No. 8: Ethics as amended by the Reference Committee on motion duly made and seconded.

Supplementary Report of the Committee on Legislation No. F

EUSTACE A. ALLEN, M.D., Atlanta, *Vice-Chairman*

Since the report of the Committee on Legislation was filed for publication in the Handbook, there has been organized The Joint Council to Improve the Health Care of the Aged. We felt the House of Delegates should be informed on this matter and might want to consider possible action.

The following resolution is submitted for your consideration:

WHEREAS, there is a great need for development of programs to foster the best possible health care for the aged regardless of their economic status, and

WHEREAS, this problem of caring for our aged is extremely important, and

WHEREAS, this problem cannot be solved by further government encroachment on the private practice of medicine but must be met and solved by the efforts of free enterprise in the best American tradition, and

WHEREAS, a bill pending in Congress called the Forand Bill does not represent the proper approach to this problem for a number of reasons as follows:

1. The Forand Bill, H.R. 9467 (which would provide government hospital and medical care for about 13 million social security claimants by amending the Social Security Act) would bring health care of the aged under government control.

2. The bill could bankrupt the social security program and jeopardize the basic retirement incomes of millions of Americans.

3. The principle of government regulation of professional fees, wages, and prices would be introduced in the United States.

4. Demands by others for similar benefits could lead to total socialized medicine.

5. It is an attempt to solve a complicated health problem by political means rather than through established medical resources. Making the aged wards of the government with health care handouts is not the proper way to solve the problem.

6. It would mean higher taxes and less take-home pay for all wage earners for the benefit of a minority.

WHEREAS, the Council of the Medical Association of Georgia has already gone on record as opposed to this Forand type legislation, and

WHEREAS, the American Dental Association, the American Hospital Association, the American Medical Association, and the American Nursing Home Association have together established the Joint Council to Improve the Health Care of the Aged, and

WHEREAS, the objectives of this Council are to identify and analyze the health needs of the aged and to appraise available health resources for the older people toward the development of adequate programs to provide the best possible health care for the aged regardless of their economic status, and

WHEREAS, this Council believes that much can be done for older people by improved health insurance coverage and by stimulation of state and community programs for health care of the aged

NOW THEREFORE BE IT RESOLVED, that the House of Delegates strongly endorses the Joint Council to Improve the Health Care of the Aged as the proper means of determining health needs of the aged before enactment of any comprehensive legislation in this field.

AND, BE IT FURTHER RESOLVED that copies of this report be sent to Georgia's Congressional Delegation in Washington together with a list of the members of the House of Delegates and any other pertinent data and information deemed necessary by the Committee on Legislation.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 1 strongly recommends approval of this resolution. It also recommends that the Committee on Legislation be granted the privilege of altering the wording of this resolution in its final form, if the intent is not changed. It further recommends that this resolution be read in its entirety at this time because of its great importance.

HOUSE OF DELEGATES ACTION—Adopted the Supplementary Report of the Committee on Legislation No. F; Health Care of the Aged as recommended by the Reference Committee on motion duly made and seconded.

It was moved by Chairman of Reference Committee No. 1 Charles T. Cowart and duly seconded that the report of Reference Committee No. 1 be accepted as a whole and it was so ordered.

Report of Reference Committee No. 2

Milford B. Hatcher, Chairman

(The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendation and the action pursuant to it taken by the House of Delegates.)

Reference Committee No. 2 met at 8:00 a.m., on April 28, 1958 in Room 720, Hotel Dempsey, Macon, Georgia. Members present were: Milford B. Hatcher, Macon, Chairman; Willis P. Jordan, Columbus, Vice-Chairman; Don W. Schmidt, Cedar-town, Secretary; Irving D. Hellenga, Toccoa; A. J. Waters, Augusta; and Needham B. Bateman, Atlanta.

First Vice-President

T. A. PETERSON, M.D., Savannah

It has been a genuine pleasure to serve the doctors of Georgia as First Vice-President. I have attended all meetings of the Council and called a special meeting of the Chairmen of all Committees of the Medical Association of Georgia to meet with me in Atlanta, Georgia, for the purpose of discussing their plans for the coming year. This meeting, I felt, was very successful and was well attended, and the chairmen and various members of the Committees were very free to discuss their plans for the coming year. Much interest was stimulated as a result of this meeting. The report of this meeting was given to a general assembly of Council.

It is recommended that the first Vice-President be called on more by the President to assist him in attending various district meetings.

I would like to commend, for their generous and efficient service, Milton Krueger and John Kiser, and other members of the staff of the Medical Association of Georgia. It has been through their generous help and wonderful cooperation that an officer of the Association can function efficiently.

REFERENCE COMMITTEE RECOMMENDATION—The report of the First Vice-President was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the report of the First Vice-President as recommended by the Reference Committee on motion duly made and seconded.

Second Vice-President

HUGH J. BICKERSTAFF, M.D., Columbus

Second Vice-President has no report to make except to state that he has attended all meetings of the Council with the exception of the one held in Valdosta in December. He also attended one meeting of the Public Health Committee of the Association of which he is chairman, and three of the four meetings of the Committee on Maternal and Infant Welfare of which he is a member.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Second Vice-President was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the report of the Second Vice-President as recommended by the Reference Committee on motion duly made and seconded.

Secretary

CHRISTOPHER J. McLOUGHLIN, M.D., Atlanta

This past year's experience as Secretary of the Medical Association of Georgia has taught me many things. Among these is the fact that it takes a lot of time and effort to administer the needs of nearly three thousand physicians. There are innumerable meetings to attend, multitudes of decisions to be made, negotiations to enter, complaints and pleas to be answered. It has been a most, meaningful year for me and, I feel, a very profitable one for the Association.

Membership figures for the year ending December 31, 1957 are as follows:

MEMBERSHIP

Active (Dues Paying)	2,403
Active (Dues Exempt)	331
Associate	12
Honorary	1
Service	49
Total	2,796

There continues to be a steady increase in membership and within another few years we shall probably have reached the three thousand mark. This would then allow us an additional delegate to the American Medical Association.

There are still a few county societies who adhere to old classifications of membership. This is somewhat at variance with that established by the Council of the MAG. It will be to the advantage of all if the same classification is used for county and state membership. The MAG follows the classification outlined by the American Medical Association.

COMMITTEE ACTIVITIES

A greater number of our committees than ever before have worked hard and have good reason to be proud of the results of their efforts. Unless a committee is active and has a program which produces results, there is no reason for that committee to exist. The activity of a committee almost invariably parallels the interest of its chairman. Vice-President T. A. Peterson, as coordinator of Committee Activity, has done an outstanding job in stimulating committees to greater effort.

Insurance: The committee on insurance has continued its usual good work during the past year despite some stumbling blocks it has encountered in the Georgia Plan. A new catastrophic hospitalization plan for members has been introduced, whereby the costs of illness are covered by insurance above the first five hundred dollars (\$500.00) which the physician pays; the insurance company then pays 80 per cent of the rest of the bill up to ten thousand dollars (\$10,000.00) for any one illness. There are very liberal age limits and dependent coverage. We are proud of the professional liability program that has been worked out with the Saint Paul Mercury Insurance Company, whereby liability insurance is provided to our members for 30 to 50 per cent less than the average premium.

Public Relations: The Public Relations Committee designed and printed a booklet for the purpose of explaining the various activities of the MAG to new members. This booklet was also distributed to old members of the MAG with the 1958 membership cards. Together with the Rural Health Committee, a series of weekly health columns compiled by MAG physicians, have been written for newspapers. These columns will be distributed to all Georgia weekly newspapers under the title of "Doc MAG Says." A variety of subjects will be covered in this way during the coming year and if it meets with the success that is anticipated, it should be continued for a long time.

A Medical School Course for senior medical students in "The Art of the Practice of Medicine," was initiated at both Emory and the Medical College of Georgia. Attendance for senior medical students is compulsory, and optional for interns and residents. In this series of lectures, well qualified men explain the problems of initiating and carrying out a well balanced medical practice.

Legislation: This committee has once again been very active and successful in its efforts to assist the state legislature in the best interests of the health of the citizens of Georgia. As guardians of the health of the people of Georgia, it is essential that we continue to use our knowledge to this end. The committee is certainly to be congratulated upon the excellent work it has done this year.

It is becoming more important that as a part of our civic duties, physicians should devote more time to problems of both the local community and the state. Physicians are among the best educated men in any community and their wisdom and experience should not be restricted solely to the practice of medicine, but more members of our Association should participate in civic and community affairs.

Additional state legislation is needed to curb the influx of cultists and curtail the opportunities for poorly trained and incompetent practitioners of medicine of all kinds. There are still too many charlatans within our state. A basic science law would prevent almost all medical quackery. A one year minimum internship law would enhance the knowledge of our own physicians.

Other Committees: The Industrial Health and the Veterans Affairs Committees have negotiated new fee schedules. The Blood Banks Committee is sponsoring a Georgia Association of Blood Banks to establish a state-wide system of blood banking based on a clearing house system. The Public Health Committee has been quite active during the Salk Polio Vaccine and the Asian Flu Vaccine campaigns. The Crawford W. Long Memorial Committee, under the chairmanship of Lester Rumble, Jr., saw the fruition of its years of work when the Crawford W. Long Museum was opened formally in Jefferson, Georgia, six months ago. The Rural Health Committee has been active and is very worthy of commendation for its good work. A training school for medical technicians in conjunction with the State Department of Vocational Training has been initiated. This committee has also distributed thousands of Family Health Record Books and individual Health Record Cards to the rural public in Georgia.

Committee appointments for the coming year are so planned that each member, henceforth, will be elected for a term of three years. In this way, each member will have an opportunity to understand the "whys" and "wherefores" of his committee activity and by the time a member has served two years on a committee, he should be well qualified for leadership. A constant rapid turnover will thus be avoided and members will be enabled to continue and consummate plans which may require more than one year to complete.

MEDICARE

During the past year your MAG has continued to act as fiscal agent for the government in the payment of claims for services rendered to dependents of personnel on active duty in the armed services. The government does not reimburse the MAG for this service in any way except where there is actual cost to our office. At times the handling of Medicare seems to be a nuisance and consumes quite a bit of your Secretary's time. However, I feel that it is very important that we continue to keep the reins in our own hands in order to see what is happening to medicine under government planning and to control, as much as possible, any thing which might react adversely against the profession in the future.

In February, a new fee schedule was negotiated with the Army as agent for the Department of Defense and at that time, an indemnity-type plan was proposed. This was rejected by the Army, but we should persevere in our efforts to obtain this indemnity plan for it will solve almost all of the great evils inherent in a fee-for-service plan. In the next few years, with more individuals being

covered by political medicine, it will become more and more important to have an indemnity plan, for otherwise the government will be able to get all fees with or without negotiation, and doctor-patient relationship will suffer.

From its initiation on December 7, 1956, through June 30, 1957, your Medicare office paid 5,111 claims at an average rate of \$75.10, or a total of \$383,022.00.

From July 1, 1957, through February 28, 1958, 12,934 claims were paid at an average of \$74.50, or a total of \$963,441.21.

The average cost of processing these claims was about one dollar and twenty-five cents (\$1.25) per claim. This cost is about the lowest in the entire country. At the present time, we are receiving approximately 2500 claims per month. About 300 must be sent back for correction and 2200 are being processed. A very great majority of these Medicare dependents are being cared for by about six per cent of our membership.

The Executive Committee of Council has appointed a review-board chairman in each of seven cities to work with local members and to assist in proper evaluation of claims. These men are doing a thankless job, and we hope you will cooperate in every way to make their work easier.

ASSOCIATION HEADQUARTERS

The Medical Association of Georgia is, at the present time, housed in a series of rooms kindly provided for us in the basement of the Academy of Medicine of the Fulton County Medical Society. Working in the Association headquarters at the present time, are the executive secretary, the associate executive secretary, two stenographers, the bookkeeper, *Journal* staff, and for the past year, the Medicare staff which at the present time consists of Mr. John Arndt (Administrator) and three associates. Part time aid is employed as need arises. Our present facilities are so situated that we are not able to take the best advantage of the amount of poor space available. The four members of the Medicare staff are crowded into one small room. There is no available space for committee or conference rooms, and storage and work rooms are badly over-crowded. Looking ahead we can see that it will be imperative to provide more adequate space. Our present facilities cannot be further expanded. A number of state associations have constructed or are contemplating construction of office-type buildings, without an auditorium. Our Association should consider some such program. Funds have been set aside for this purpose each year since 1942, and a proper substantial bank balance is now available. With proper financing, it is believed that a building could be erected without need for assessment of members. The Fulton County Medical Society, at the present time is willing to work out some mutually advantageous plan which would give us building space on part of their property. Your Council feels that a new building is needed and has appointed a committee to discuss plans for the ground with the Fulton County Medical Society. It is hoped that the House of Delegates will approve going ahead with the plans for the building.

Personnel: Mr. Krueger, the Executive Secretary, continues his very able leadership of the personnel. This however, is only part of his official duties. Outside the office he visits many of the societies and districts, meets with insurance boards and various com-

mittees and in general coordinates the workings of the organization. Mr. Kiser is more active in the field and visits a great many individual societies and discusses local problems with societies and physicians. He has several very active committees under his care and he, too, is doing a very excellent job. The rest of the Association staff are doing their utmost to keep our organization a most efficient one.

During the past year, I have been amazed at the tremendous amount of work done and the time spent by your President, W. Bruce Schaefer, in carrying out his official duties. He has never offered an excuse for non-attendance at any meetings. He has traveled to and from Atlanta several times each week to work with committees. The membership is to be congratulated upon having such an active and cooperative leader and on behalf of all, I would like to offer my thanks to him for a job well done.

The Chairman of Council, George R. Dillinger and every member of this industrious body have been very cooperative and have taken a lively interest in the problems of the Association. To work with such men has been a pleasure.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Secretary was accepted and approved with the following exceptions. The Committee recommends that the Insurance Committee re-evaluate catastrophic hospitalization plans for members as there are other group catastrophic plans which are most attractive. The Committee commended those who have assisted in preventing the influx of cultists into our state and further recommends that the Legislative Committee prepare legislation for the enactment of a basic science law and a one year minimum internship law. Further, the Committee recommends that indemnity type plan insurance be pressed for in all types of medical insurance including Medicare.

Further also, the Committee recommends that plans for the Headquarters Building be pushed and that Council be empowered to proceed with plans for completion of this project. This building is to be erected on such site deemed advisable, regardless of location in the state.

HOUSE OF DELEGATES ACTION—After discussion of that part of the Reference Committee recommendation which states: "Further, the committee recommends that indemnity type plan insurance be pressed for in all types of medical insurance including Medicare" it was moved (Coward, Troup-Hammett, Troup) to delete the words in that statement "for all types of medical insurance" making the statement read as follows: "Further, the Committee recommends that Indemnity type plan insurance be pressed for Medicare." This motion was then approved and the House adopted the report of the Secretary as recommended by the Reference Committee with the amendment of the Reference Committee recommendation by the House.

Treasurer

CHRIS J. McLOUGHLIN, M.D., Atlanta

Attached herewith is a report of the audit as prepared by Ernst & Ernst for the calendar year ending December 31, 1957.

It will be noted that there is an increase in the overall operating expenses of the Association. Several factors have contributed to this. (a) Increase in salaries. (b) Increase in cost of publication of the *Journal*. (c) Increase in legal fees. (d) Increase in appropriations for various committees.

This increase in operating expenses is off-set when we consider: (a) Salaries must be kept consistent with the increases in responsibilities and living costs, and with the level of remuneration paid by other state medical societies. (b) The increase in cost of publishing the *Journal* was more than off-set by the increased advertising revenues. (c) Our legal expenses should fall

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MANAGEMENT SERVICES

OFFICES IN PRINCIPAL CITIES
ASSOCIATES IN FOREIGN COUNTRIES

Chairman of The Council
The Medical Association of Georgia
Atlanta, Georgia

We have examined the financial statements of The Medical Association of Georgia as of and for the year ended December 31, 1957. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying statement of assets and liabilities - by funds and the statement of income and expense present fairly the financial position of The Medical Association of Georgia at December 31, 1957, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Ernst & Ernst
Certified Public Accountants

Atlanta, Georgia
February 21, 1958

This certificate or report upon an audit or examination is delivered to client with the distinct understanding that any advertisement, publication, or copy therefrom, in full or in part, of such certificate or report, shall be in the form to be approved by us. It is a prerequisite against fraud, attention is directed to the fact that all pages in this report should bear our scales mark.

rather sharply as soon as we have settled our two major legal problems which are:

1. The Talmadge Hospital situation.
2. Legal claims which are instituted before a level of one-hundred dollars was placed upon the value of legal assistance supplied to a member.

During the past year the Medical Association operated for the first time upon a deficit budget. Only the increases in revenues from the *Journal* and reduction in salary of the Secretary-Treasurer prevented our expenditures from ending entirely in the red. As it was, it was rather pleasant to note that in 1957, the Association was able to add to its assets the sum of \$2822.00.

The increase in dues voted for 1958 has again put the Association on a firm financial foundation. A contingent fund has been established to take care of unexpected expenditures, and committee appropriations for this year are in excess of any previous year. This may be translated in terms of a marked increase in service to respective county societies and physicians.

As the expense of preparing a worthwhile annual session is mounting year by year, ways and means of meeting this increase must be found. Sometime ago it was suggested that an increase in space rates for commercial exhibits be made. However, judging from comments by some of the exhibitors, a further increase would be a very unwise move. I feel that our exhibitors are willing to pay a sum only in proportion to the amount of service that the Association can render. In most instances, the individual physician is most responsible for visiting the exhibitors and making them feel that they are receiving value for their money.

In accordance with the recommendations of our

auditors, I would suggest that the Benevolent expense continue to be paid from cash income and be continued as it has for some time, as an item of the budget. It is very unlikely that in the foreseeable future we will have more than two or three physicians receiving the maximum amount (\$600.00 each) from these funds. All monies then remaining in this fund should be considered part of the Building Fund. I would also comply with the suggestion of Ernst and Ernst that part of the assets now listed under the general fund be transferred

to the Building Fund, keeping at least \$20,000 in the general fund at all times. In this way we shall be able to obtain more return for our money.

Miss Thelma Franklin has been a most efficient book-keeper and is very unstinting of her time. She has been most cooperative in helping me understand the intricacies of the office of Treasurer. The Chairman of the Finance has also assisted in the fullest and it was a pleasure to work with such cooperation.

STATEMENT OF ASSETS AND LIABILITIES — BY FUNDS
The Medical Association of Georgia
December 31, 1957

	General Fund	Department of the Army— Medicare Fund	Benevolent and Building Funds	Abner W. Calhoun Lectureship Fund	Combined
ASSETS					
Cash:					
Demand deposits and office cash fund . . .	\$ 4,334.28	\$ 21,900.84	\$ -0-	\$ 142.51	\$ 26,377.63
Savings deposits	20,000.00	-0-	25,000.00	-0-	45,000.00
	<u>\$24,334.28</u>	<u>\$ 21,900.84</u>	<u>\$25,000.00</u>	<u>\$ 142.51</u>	<u>\$ 71,377.63</u>
Marketable securities:					
United States Government securities— at cost or redemption prices (aggre- gate quoted redemption prices \$41,- 211.00)	\$ -0-	\$ -0-	\$42,096.00	\$ -0-	\$ 42,096.00
Corporate stocks—at cost (quoted market prices \$5,305.50)	-0-	-0-	-0-	6,101.85	6,101.85
	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$42,096.00</u>	<u>\$6,101.85</u>	<u>\$ 48,197.85</u>
Accounts receivable:					
Due from United States Government:					
Service fees paid physicians and dentists	\$ -0-	\$117,099.16	\$ -0-	\$ -0-	\$117,099.16
December, 1957 provisional claim costs .	1,791.70	-0-	-0-	-0-	1,791.70
Exhibitors—1958 annual meeting . . .	2,737.50	-0-	-0-	-0-	2,737.50
Advertisers of The Journal and sundry other accounts	5,027.67	-0-	-0-	-0-	5,027.67
	<u>\$ 9,556.87</u>	<u>\$117,099.16</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$126,656.03</u>
Equipment—on the basis of cost:					
Office furniture and equipment	\$12,660.57	\$ -0-	\$ -0-	\$ -0-	\$ 12,660.57
Less allowance for depreciation	3,709.11	-0-	-0-	-0-	3,709.11
	<u>\$ 8,951.46</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ 8,951.46</u>
Prepaid expenses of 1958 annual meeting . .	1,197.54	-0-	-0-	-0-	1,197.54
	<u><u>\$44,040.15</u></u>	<u><u>\$139,000.00</u></u>	<u><u>\$67,096.00</u></u>	<u><u>\$6,244.36</u></u>	<u><u>\$256,380.51</u></u>
LIABILITIES					
Accounts payable and accrued expenses:					
Trade accounts payable	\$ 4,769.58	\$ -0-	\$ -0-	\$ -0-	\$ 4,769.58
Pay roll taxes	282.32	-0-	-0-	-0-	282.32
	<u>\$ 5,051.90</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ 5,051.00</u>
Advance from United States Government . .	-0-	139,000.00	\$ -0-	-0-	139,000.00
Deferred income—exhibitors' fees 1958 annual meeting	7,875.00	-0-	-0-	-0-	7,875.00
	<u>\$12,926.90</u>	<u>\$139,000.00</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$151,926.90</u>
EXCESS OF ASSETS OVER LIABILITIES					
Balance at January 1, 1957	\$28,259.97	\$ -0-	\$66,888.00	\$6,508.28	\$101,656.25
Income for year in excess of (less than*) expenses	2,853.28	\$ -0-	208.00	263.92*	2,797.36
Balance at December 31, 1957	<u><u>\$31,113.25</u></u>	<u><u>\$ -0-</u></u>	<u><u>\$67,096.00</u></u>	<u><u>\$6,244.36</u></u>	<u><u>\$104,453.61</u></u>
	<u><u>\$44,040.15</u></u>	<u><u>\$139,000.00</u></u>	<u><u>\$67,096.00</u></u>	<u><u>\$6,244.36</u></u>	<u><u>\$256,380.51</u></u>

STATEMENT OF INCOME AND EXPENSE — BY FUNDS

The Medical Association of Georgia
Year ended December 31, 1957

	General Fund	Benevolent and Building Funds	Abner W. Calhoun Lectureship Fund	Combined
INCOME				
Membership dues:				
Year 1957	\$59,062.50	\$ -0-	\$ -0-	\$59,062.50
Prior years	300.00	-0-	-0-	300.00
Less* allocation to subscriptions to The Journal	11,812.50*	-0-	-0-	11,812.50*
	<u>\$47,550.00</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$47,550.00</u>
Net income from The Journal	3,249.98	-0-	-0-	3,249.98
Interest income:				
United States Government securities—				
Note A	812.50	-0-	-0-	812.50
Increase in redemption value— United States Government securities	-0-	208.00	-0-	208.00
Savings deposits	1,533.33	-0-	-0-	1,533.33
Dividends on corporate stocks	-0-	-0-	\$263.92	263.92
	<u>\$53,145.81</u>	<u>\$208.00</u>	<u>\$263.92</u>	<u>\$53,617.73</u>
EXPENSES				
Salaries	\$24,989.50	\$ -0-	\$ -0-	\$24,989.50
Less allocation to The Journal	5,195.83	-0-	-0-	5,195.83
	<u>\$19,793.67</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$19,793.67</u>
Administrative and other expenses	27,942.76	-0-	-0-	27,942.76
Expenses of 1957 annual meeting, less fees from exhibitions of \$8,575.00	3,223.66	-0-	-0-	3,223.66
Lecture expenses	-0-	-0-	514.64	514.64
Trustee's fee	-0-	-0-	13.20	13.20
	<u>\$50,960.09</u>	<u>\$ -0-</u>	<u>\$527.84</u>	<u>\$51,487.93</u>
TOTAL EXPENSES	<u>\$ 2,185.72</u>	<u>\$208.00</u>	<u>\$263.92*</u>	<u>\$ 2,129.80</u>
OTHER INCOME				
Received from American Medical Association for services	667.56	-0-	-0-	667.56
INCOME IN EXCESS (LESS THAN*)				
EXPENSE	<u>\$ 2,853.28</u>	<u>\$208.00</u>	<u>\$263.92*</u>	<u>\$ 2,797.36</u>

NOTE A—On May 10, 1953, The Council authorized interest received on United States Savings Bonds held in the Benevolent and Building Funds to be recorded in the general fund.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Treasurer was accepted and approved. The Treasurer is commended by the Committee for his excellent work.

HOUSE OF DELEGATES ACTION—Adopted the report of the Treasurer as recommended by the Reference Committee on motion duly made and seconded.

Tenth District Councilor

A. W. SIMPSON, JR., M.D., Washington

As Councilor for the Tenth District of the Medical Association of Georgia, I wish to report that medical conditions in the Tenth District have been most satisfactory for the past year, complaints having been at a

minimum, all county societies have been active and with the exception of the Warren County Society, it appears that all of the component societies have been active, holding their scientific and business meetings. The Tenth District Medical Society itself, held two meetings during the past year. The regular summer meeting was held in Elberton on August 15th. An excellent scientific program was presented and the official business meeting was held at this time. The mid-winter meeting was held in Athens, Georgia, February 20th, where what was generally conceded to be the best scientific meeting ever held in the Tenth District took place.

As Councilor, I attended both of these meetings and

the problems of the council were discussed where they pertained to the members of the Tenth District.

I attended all of the meetings of council except the one held in Valdosta, Georgia in December. At these meetings I took an active part in an attempt to solve the Talmadge Hospital, Medical College of Georgia problem, and it is my aim as Councilor from the Tenth District to continue my efforts in the behalf of clearing this great problem of the Tenth District.

Tenth District Vice-Councilor

DAVID R. THOMAS, JR., M.D., Augusta

The responsibilities as vice-councilor of the Tenth District have been very little, as Dr. Addison Simpson, Jr., the Councilor of this District has been active and has attended to all of the duties, leaving little to be done by me. I have attended all meetings of Council with Dr. Simpson except the one in Valdosta in December.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Tenth District Councilor and Vice-Councilor was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Tenth District Councilor and Vice-Councilor report as recommended by the Reference Committee on motion duly made and seconded.

Veterans Affairs

HARTWELL JOINER, M.D., Gainesville, *Chairman*

1. Your V.A. Affairs Committee investigated the need for, or lack of need for, additional V.A. beds in Georgia.

2. The Committee found many unused beds available in V.A. Hospitals in the state.

3. The committee and special appointed committees objected to construction of any more V.A. beds in the state of Georgia.

4. The committee revised item by item the fee schedule as paid for Medical and Surgical and Allied Services by the V.A. to doctors in the state; and made recommendations for changes in the fee schedules. The changes have been made, approved by the Council, and are now in effect. The recommendations were made only after inquiry of two or more physicians in different communities of the state, and every division of the professional services was represented by positive recommendations.

For the year 1958 the committee:

(1) Proposes continued observation of the daily hospital census at V.A. hospitals, with beds available.

(2) Will keep up with proposed new construction recommended by our representatives, if any.

(3) Is now and will continue to support the Oklahoma County Medical Society's recommendations to Congressman Teague; and is urging Georgia's representative to the Congress to add on a bill to enable prosecution of any and all who 'swear falsely' on the 10-P-10 form for admission to V.A. Hospitals.

(4) Recommends that one member of the committee attend the AMA special meeting when called to session by the chairman of that Committee and make report of same to the Council.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Veterans Affairs Committee was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Veterans Committee report as recommended by the Reference Committee on motion duly made and seconded.

Woman's Auxiliary Advisor

VIRGIL B. WILLIAMS, M.D., Griffin, *Chairman*

The committee met with the Executive Board of the Woman's Auxiliary to the Medical Association of Georgia at the Atlanta Athletic Club on June 22, 1957. The advisory committee reviewed the proposed activities of the auxiliary for the coming year. Suggestions were made concerning a few very minor controversial items in the program.

Since the meeting in June, members of the advisory committee have been consulted informally on several occasions and have given advice as indicated. The advisory committee has been available for advice at all times.

We wish to express our appreciation to the Woman's Auxiliary for their comprehensive and intelligent efforts and their continued interest on the behalf of the Medical Association of Georgia. Especially, should we like to commend them for their untiring work in the field of public relations.

REFERENCE COMMITTEE RECOMMENDATION—Report of the Woman's Auxiliary Advisory Committee was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Woman's Auxiliary Advisory report as recommended by the Reference Committee on motion duly made and seconded.

Medical Civilian Preparedness

EDGAR M. DUNSTAN, M.D., Atlanta, *Chairman*

The activities of this committee for the year 1957-1958 may be summarized as follows:

1. Continued in an advisory capacity to the State Civil Defense Health Services Division on medical Civil Defense matters. On Wednesday, September 4, 1957, Drs. Charles Dowman and Edgar Dunstan addressed the staff of the Georgia Civil Defense Health Service on the subject, "The Practicing Physician's Role in Preparation for Disaster in Georgia."

2. Participated in the Conference for Medical Civilian Preparedness Committees for the Southeastern States put on by the Council on National Defense of the American Medical Association on October 5, 1957.

3. Participated in the Coordination Activities of the Implementation Committee for Region Three (Southeastern States) of the Federal Civil Defense Administration.

4. Participated in the third year of instruction in the Course on Catastrophic Injuries and Diseases instituted by the Emory University School of Dentistry as a regular course for senior dental students.

5. Prepared and distributed three articles, namely: "Proposed Creation of Positions of Deputy Director in Charge of Hospital Civil Defense in all Community Hospitals," "The Civil Defense Emergency Hospital as the Basic Training Unit and Hospital Bed Reservoir for Disasters," and "The Civil Defense Emergency Hospital as the Basic Training Equipment for Reserve Hospital Units." The first of these articles has been published in the June 1957 issue of *Hospital Management*. The others will probably be published soon in appropriate journals for still wider distribution.

6. The committee recently witnessed the realization of a long-term project in which it has been engaged, namely, approval by the Defense Department of the use of the Civil Defense Emergency Hospital as regular

training equipment for Reserve Hospital Units. The Atlanta Reserve Hospital Unit has already received a packaged Civil Defense Emergency Hospital and the Augusta Reserve Hospital Unit should receive one soon. Civilian hospitals will undoubtedly profit by authorized joint practice run exercises with these reserve hospital units. These, with the unit stored at Oxford, Georgia, make three Civil Defense Emergency Hospital Units available to be moved in case of disaster to any place in Georgia where there is need for this equipment. The Chairman talked to the Newton County Medical Society on October 15, 1957, and distributed the article "The Civil Defense Emergency Hospital as the Basic Training Unit and Hospital Bed Reservoir for Disaster," urging the Society to be ready at all times to set up and operate this emergency hospital wherever needed.

The committee recommends that:

1. The composition of the Medical Civilian Preparedness Committee continue as at present, namely, one member from each of the six key civil defense areas of the state together with any other members-at-large that the President may wish to appoint.

2. The advisory and coordinating functions of the committee continue as in the past.

3. Intensified efforts be made to assist the Georgia Civil Defense Health Services Division to secure more Civil Defense Emergency Hospitals for storage near all major target areas in Georgia and urge the Division to sponsor joint practice run exercises, with these units as nuclei, to insure that all sections of the state are adequately prepared to cope with natural and enemy-caused disasters whenever these may occur.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Medical Civil Preparedness Committee was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Medical Civil Preparedness Committee report as recommended by the Reference Committee on motion duly made and seconded.

Eye Care of the Newborn

J. JACK STOKES, M.D., Atlanta, *Chairman*

The Advisory Committee on Eye Care of the Newborn of the Medical Association of Georgia was formed at the request of the Maternal and Child Health Division of the Georgia Department of Public Health. The Committee consisted of Dr. Jack Stokes, Chairman, Dr. Thomas McPherson, Dr. Joseph Girardeau, and Dr. C. A. N. Rankin. The purpose of the Committee was to evaluate the present methods of preventing retrolental fibroplasia and ophthalmia neonatorum and to consider other means of prophylaxis if they appeared feasible.

In order to determine the methods of control of oxygen administration to prematurely born infants in the delivery room and nursery, the Committee directed the Georgia Department of Public Health to send a questionnaire on oxygen control to all hospitals in the state. Dr. Helen W. Bellhouse and Dr. Dorothy S. Jaeger-Lee, of the Division of Maternal and Child Health, Georgia Department of Public Health, conducted the survey and tabulated and analyzed the information received. This information indicated a need for an inexpensive and effective control procedure for the administration of oxygen.

Dr. Bellhouse and Dr. Jaeger-Lee then prepared a policy for controlled oxygen administration for premature infants. This was received, discussed, and

edited by the Committee on Eye Care of the Newborn of the Medical Association of Georgia, after which copies were sent to all hospitals in Georgia which have facilities for the care of newborn infants, and to the ophthalmologists, pediatricians, general practitioners, and obstetricians in the state. A bibliography of the important literature on retrolental fibroplasia was appended. The bulk of the work on this project was done by the Division of Maternal and Child Health, the members of the Committee serving in an advisory capacity.

Although the installation of silver nitrate as a prophylaxis against ophthalmia neonatorum is presently required by law in the state of Georgia, there has been increasing dissatisfaction with the use of the drug. Numerous antibiotics have been advocated as possible replacements for silver nitrate. However, none have proven to be as effective and as safe as silver nitrate. The Newborn Eye Care Committee and the Maternal and Child Health Division hope to have studies conducted in an effort to determine the efficiency of the various antibiotics which may be used as substitutes for silver nitrate.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Eyecare of the Newborn Committee was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Eyecare of the Newborn Committee report as recommended by the Reference Committee on motion duly made and seconded.

VFW Liaison

BRUCE SCHAEFER, M.D., Toccoa, *Chairman*

This newly formed committee held its first meeting February 12. Present representing the MAG were myself, Charles Andrews, Chris. J. McLoughlin, and Mr. John Kiser. Present representing the VFW were Asa Kelley, Albany, Ralph Medlock, Stone Mountain, Rev. O. P. Shirley, Gainesville, and James H. Floyd, VFW Executive Secretary, Summerville.

The two committees plan to meet periodically to discuss VA medical care. Areas of agreement as well as areas of disagreement are discussed, and it is hoped that better understanding and mutual respect will be developed. The next meeting of the two Committees is scheduled for March 26, and we may have a more complete report at a later date.

REFERENCE COMMITTEE RECOMMENDATION—The VFW Liaison Committee report was accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted the Veterans of Foreign Wars Liaison Committee report as recommended by the Reference Committee on motion duly made and seconded.

Woman's Auxiliary to the Medical Association of Georgia

MRS. JOHN L. ELLIOTT, Savannah, *President*

Your Auxiliary proudly serves in the role of partner to its outstanding Medical Association. We are honored when you call upon us, and we have done our best to answer the calls that you have made.

This year you have asked us to do the following things, and we are pleased to report our progress:

1. To put *Today's Health* in every High School in Georgia. This we have done in those counties where we have Auxiliaries, but since we cover only ninety-six counties and since the request came after our budget for

the year had been adopted, we had to leave some counties uncovered. This project we will consider setting up for another year.

2. To assist in the Mental Health Education throughout the state and promote such legislation in its behalf as is approved by MAG. This we have done. One county has devoted its programs to the various phases of Mental Health, inviting leaders of other groups in the community to attend; many counties have sponsored public programs with films and discussion, informing the public of the policy of MAG regarding mentally ill patients. Very effective work has been done with Parent-Teacher and other groups.

3. To interest High School Students and their Parents in allied medical professions. A Georgia Auxiliary is justly proud to have set up the first Career Guidance Center in conjunction with a junior college. Having been begun under the auspices of an Auxiliary, recruitment of students in the allied medical fields has received considerable emphasis. This center is being studied and copied throughout the nation.

Auxiliaries sponsor Health Career Clubs in High Schools and give scholarships to deserving students in Nursing Schools.

4. To assist in getting correct information on legislation affecting health, to the public generally, and to the legislators in our respective counties. Our state legislative chairman used key Auxiliary women over the state to fill in where the doctors were too busy to take care of the situation at the proper time and several times on the spur of the moment when prompt action was of the essence. Our Chairman reports, "the response for action was tremendous. Auxiliary members all over the state are to be commended for their efforts." We appreciated the commendation from you.

On the National level, we have plugged for the Jenkins-Keogh Bill and against the Forand bill. Time is given at County Auxiliary Meetings for the legislative chairman to present legislation of interest as approved by MAG.

5. To contribute to the William R. Dancy Student Loan Fund which is set up to help worthy medical students complete their education. This fund has made its 28th loan this year, averaging one a year for each year of its existence.

6. To contribute to the American Medical Education Foundation. We have done this through memorial and sympathy contributions as well as through the County Auxiliaries. This adds our bit in trying to keep up the standards of medical schools and to keep them medical schools instead of schools underwritten and dominated by the government. This year our contribution should top the \$1,500.00 mark.

7. To stress safety in its various phases. Particular emphasis has been placed on Driver Education Training in the High Schools. This seems to be good preventive medicine.

8. To preserve some medical history each year so that the story of valuable contributions made by the doctors of Georgia will not be lost to posterity. Each Auxiliary is asked to write a paper covering a subject of particular interest to that locality. These are preserved in the Archives as well as in Southern Medical Association's archives.

We were pleased to have had a hand in collecting

suitable instruments to be placed in the Crawford Long Museum in Jefferson, this year.

March 30, the date of Crawford Long's first use of ether as an anesthetic, we choose to call "Doctor's Day" and to show the administration that we feel for the profession to which we are an ally. We also call attention of the public to the unselfish service which the doctor is pledged to give to humanity.

9. To keep informed of our role in case of disaster. Civil Defense is a continuing part of our program, aiming at keeping us informed of this role.

Besides these things which we call the state and national program, each Auxiliary carries out its own projects which are peculiar to that community. These local projects are the *musts*, remembering always that our first duty is to the Medical Society to which we are an Auxiliary. The County Auxiliaries are then asked to select as much of the state and national program as they can fit into their program.

These local projects have scope, ranging all the way from needs of the communities of the very smallest Auxiliary (boasting 100 per cent membership and numbering four members) to the very largest (pushing 500).

To mention a few: Setting up and helping with a school for handicapped children; "What you should know from head to toe" health exhibit manned by members; Cancer Guidance Center for high school and college students; Giving scholarships in allied medical fields; Making hospitals and medical centers more attractive; Helping carry a hospital bond election; Organizing medical student's wives—giving them an idea of the scope of their opportunity and responsibility in helping the profession; Organizing a Mental Health Council; Furnishing suitable recreation for hospital patients at Battey; Establishing loan closets for hospital patients. These and many more will be explained in detail in our Annual Report which is distributed at the Convention.

Quarterly we publish an *Auxiliary News* which serves to create interest in Auxiliary work and to keep the wives all over the state in touch with one another: it is a valuable media of information.

MAG publishes for us an annual directory of all Auxiliary Members. This is a separate booklet instead of taking place in your *Journal* and at the same time is more useful to us.

For the purpose of coordinating Auxiliary work all over the state, we held a Conference for County Presidents and District Managers in June. We have four Executive Board meetings each year, one of which is attended by our Advisory Committee to approve plans for the year's work. The attendance at these from the various counties has increased noticeably, indicating increased interest.

We are kept informed of national policies of AMA and the Auxiliary through attendance at the AMA Convention and at the Fall Conference of State Presidents and Presidents-Elect in Chicago. You will be pleased to know that your Auxiliary compares very favorably with other states. We only get red faces over the "red dots" indicating counties with no Auxiliary members. (Of course we know that Georgia is a large state and has almost three times as many counties as most states, but we do lament the fact that doctors in these areas do not have the help of an Auxiliary.

and do ask your support in remedying this situation.)

This year we have made a conscious effort to take stock and evaluate our activities to see whether they carry out our objectives which add up to: rendering the service needed by our medical societies. One of our objectives is that we should promote *acquaintance-ship* so that *fellowship* may increase. We feel that this is essential, since it generally follows that where there are Auxiliaries there are better relations among the doctors themselves and there are better public relations.

For the privilege of serving as your Auxiliary we are happy; for the understanding, financial assistance, and guidance that you have given us through your Council, House of Delegates, Executive Office, and our Advisory Committee we are grateful. We welcome your advice and suggestions; our aim and desire is to improve our service to you and through it, to humanity.

REFERENCE COMMITTEE RECOMMENDATION—The Reference Committee approved and accepted the report of the Woman's Auxiliary to the Medical Association of Georgia and commended the Auxiliary for the excellent work it is doing in behalf of the members of the Medical Association of Georgia.

HOUSE OF DELEGATES ACTION—Adopted the Woman's Auxiliary to the Medical Association of Georgia report as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 1

Tax Reduction for Fraternity Houses

RICHMOND COUNTY MEDICAL SOCIETY

WHEREAS, the Commonwealth of Georgia is saved a considerable sum of money by fraternities and sororities that own their chapter houses, which take the place of dormitories that would otherwise be needed and would cost the state large outlays in funds, and

WHEREAS, these chapter houses are homes for the members of the various fraternities and sororities and are not profit-making or commercial in either intent, or in fact, or in any sense of the word, many of them having great difficulty in making both ends meet,

BE IT RESOLVED THAT the House of Delegates of the Medical Association of Georgia in regular session in Macon, Georgia, April 27-30, favors

1. A reduction in taxes on all fraternity and sorority houses owned by the various chapters, including taxes on their contents, and

2. A cessation of charges at commercial rates by public utility companies for gas, light, power, etc.

REFERENCE COMMITTEE RECOMMENDATION—The Reference Committee recommends that Resolution No. 1: Tax Reduction for Fraternity Houses be accepted and approved.

HOUSE OF DELEGATES ACTION—Adopted Resolution No. 1: Tax Reduction for Fraternity Houses as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 5

Notification of Increase in Dues

MUSCOGEE COUNTY MEDICAL SOCIETY DELEGATION

BE IT RESOLVED that the component societies of the Medical Association of Georgia be notified of any contemplated increase in dues and/or assessments, together with the reasons for these proposed increases.

This notification is to be forwarded to the societies not less than 90 days prior to the annual meeting of the House of Delegates.

REFERENCE COMMITTEE RECOMMENDATION—The Reference Committee recommended that Resolution No. 5: Notification of Increase in Dues be accepted as recommended except that notification be forwarded not less than thirty days prior to the annual meeting rather than ninety days.

HOUSE OF DELEGATES ACTION—Adopted the Resolution No. 5: Notification of Increase in Dues as amended by Reference Committee on motion duly made and seconded.

It was moved by Chairman of Reference Committee No. 2, Milford B. Hatcher, and duly seconded, that the report of Reference Committee No. 2 as amended be adopted as a whole and it was so ordered.

Report of Reference Committee No. 3

Thomas J. Anderson, Jr., M.D., Atlanta, Chairman

(The following reports as presented to this Reference Committee are printed in full with the reference committee's recommendation and the action pursuant to it taken by the House of Delegates.)

Reference Committee No. 3 met at 8:00 a.m., Monday, April 28, 1958, in Room 934, Hotel Dempsey, Macon, Georgia. The following members were present: Thomas J. Anderson, Jr., Atlanta, Chairman; Paul L. Bradley, Dalton, Secretary; R. C. McGahee, Augusta; T. A. Sappington, Thomaston; Ralph N. Johnson, Rome; L. H. Griffin, Claxton; Luther Roberts, Columbus; Leo Smith, Waycross, and M. F. Arnold, Hawkinsville.

Speaker of the House of Delegates

THOMAS W. GOODWIN, M.D., Augusta

The Speaker has attended all of the meetings of the Council of the Medical Association of Georgia with the exception of one and has been privileged to consider, deliberate, and vote at these Council meetings.

It continues to be the primary objective of the Speaker to see that all the deliberations of the House of Delegates are conducted in a fair and impartial manner and that full opportunity be given both sides to express themselves on any controversial issue.

The Speaker also oversees the appointment of reference committees for the conducting of the business of the House, Credentials Committee and Tellers Committee, publication of the House of Delegates Handbook, which is sent every delegate in advance of the meeting of the House; and finally, the Speaker also oversees the publication and dissemination of the proceedings of the House.

Your speaker's only recommendation is that each and every component society strive to see that its delegate or delegates are present at the sessions of the Association House of Delegates so that our organization may at all times be truly appreciative of the doctors in Georgia.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Speaker of the House of Delegates was adopted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the Speaker of the House of Delegates report as recommended by the Reference Committee on motion duly made and seconded.

Council of the MAG

GEORGE R. DILLINGER, M.D., Thomasville, *Chairman*

The business and activities of your Association continue to grow at an unprecedented rate. At the May 1st, 1957, meeting of Council, George R. Dillinger of Thomasville, was elected Vice-Chairman; J. G. McDaniel of Atlanta, was elected Vice-Chairman and Chris J. McLoughlin, Atlanta, was appointed Treasurer by the Executive Committee. This appointment was confirmed by vote of Council.

Also at this organizational meeting, special legal counsel as directed by the House of Delegates was approved. The firm of Alston, Sibley, Miller, Spann, and Shackelford were retained for the year 1957-58.

Your Council and this Executive Committee met during the past year and had almost 100 per cent attendance at all meetings, and I wish to commend them to you for their untiring effort in transacting the business of the Association.

I wish to bring to your attention the numerous and varied activities of your President, W. Bruce Schaefer, and the most excellent manner in which he has carried out the duties of that office. You can be assured that he has worked unceasingly in your behalf and no words of mine can express the tribute that he deserves for the excellent job. I also wish to commend the Immediate Past President, Hal Davison; the President-Elect, Lee Howard; The Vice-Presidents, T. A. Peterson and Hugh Bickerstaff for their constant attendance and work in your interests.

Your newly elected Secretary Chris J. McLoughlin has done a most excellent job in your behalf.

The *Journal of the Medical Association of Georgia* continues to grow under the able direction of Edgar Woody, until it is now recognized as being one of the outstanding state medical journals. His staff and contributing editors must also be included in this commendation.

Your Headquarters Office Staff under the able direction of Mr. Milton Krueger, Executive Secretary, and the Associate Executive Secretary, Mr. John Kiser, is constantly growing and becoming more efficient.

I must also pay tribute to Mr. John Arndt and the staff of the Medicare office for the efficiency and attention to details with which they carry out their job.

MEDICARE

The Medicare Officer working under the direction of the Executive Committee is constantly increasing its efficiency. The cost of processing claims so far as we know, is less than that in any other state. All claims are usually being paid within 14 days of receipt of the claim, unless there is some question regarding the amount of the claim or the claim is improperly filled out.

We wish to here, pay tribute to Charles Jones and the Medicare Review Board, who have served without remuneration in order that the Medicare program might be efficiently administered in your interest with the approval of Council. A national Medicare meeting was held in Atlanta on January 11-12 at the Academy of Medicine. The meeting was called because your Council believed that the Medicare program and Public Law 569 is permissive for payment for care on an indemnity basis rather than the present full service contract.

Action of this meeting was as follows:

"The representatives of state medical associations met in Atlanta, Georgia, January 11-12, 1958, to consider Medicare object to the Administrative regulations of the program.

"Specifically, they take exception to the imposition of a service-type program, because of their convictions that under P.L. 569 an indemnity type plan is permissible. Further, they express their sincere belief that an imposed service-type program interferes in principle and in practice with the doctor-patient relationship and contributes to deterioration of good medical practice.

"They consider it imperative for those and other state associations jointly to petition the appropriate congressional committees and the Secretary of Defense to permit negotiations of an indemnity program at the time of renewal of Medicare contracts.

"They therefore agree to request their associations to petition the approximate congressional committees and the Secretary of Defense in this regard, in a concerted action, at the earliest moment permitted by approval of the associations concerned."

This statement of policy was approved for Georgia by Council and should be endorsed by the MAG House of Delegates.

The new Medicare contract was negotiated in Washington on February 10 and 11 by the Negotiating team of Charles S. Jones, Medicare Review Board Chairman; Chris J. McLoughlin, Secretary-Treasurer of the Association; Mr. John D. Arndt of the Medicare Office. This negotiating team at the request of Council asked for and presented to the Armed Forces a proposal for an indemnity type program. The Army stated that they could not at this time negotiate an indemnity type program, but that they would forward it to the proper channels for consideration. The negotiating team then arranged a contract for the coming year on the basis of the old contract but it is hoped future negotiation may allow an indemnity contract.

Council wishes to bring to your attention the fact that the Medical Association of Georgia is operating the Medicare program efficiently and at less cost per claim than any of the other states.

TALMADGE HOSPITAL PROBLEM

During the year continued attempts have been made by your special attorney and officers on the Association to arrange some settlement of the Talmadge Hospital problem and the corporate practice of medicine. Six physicians on the full time faculty of the Medical College of Georgia engaged in practice on private patients appealed to the Judicial Council of the American Medical Association for membership. On September 7, 1957, the AMA Judicial Council hearing was held regarding this appeal. Your Association was represented by Mr. Francis Shackelford and Mr. John Moore, special attorneys and the Chairman of Council. The Richmond County Medical Society was represented by Charles Hock, President of the Richmond County Medical Society. After hearing the arguments on both sides, the Judicial Council denied the appeal on the basis of "no jurisdiction." After the denial of the appeal of the faculty members of the Talmadge Memorial Hospital, by the Judicial Council, your MAG Council Chairman, after consultation with the special attorneys called an informal meeting at the Headquarters Office on October 6, 1957 to explore the possibilities of settlement of the dispute between the Talmadge Memorial Hospital and

the Medical College of Georgia and involving the Richmond County Medical Society and the Medical Association of Georgia. This meeting was attended by the President of the Medical Association of Georgia; the Chairman of Council; The Secretary of MAG and Mr. Milton Krueger; the special Association Attorney, Mr. Francis Shackelford and Mr. John Moore; the President of the Medical College of Georgia; Chairman of the Department of Surgery from the Medical College, and Assistant Chairman of the Department of Surgery. Mr. Seibert, representing the Board of Regents; and Mr. Robert Hall, Assistant Attorney General. The President of the MAG presided at the meeting. After prolonged discussion of the entire situation, a tentative program was agreed upon by all parties present. This program was to be presented to the Richmond County Medical Society for discussion and approval; also to the Council of the Medical Association of Georgia. However, before the meeting of the Richmond County Medical Society could be held, the President of the Medical College of Georgia reversed his opinion and refused to consider the matter further. At the present writing, pursuant to requests by the Medical Association of Georgia the Richmond County Medical Society and the President of the Medical College of Georgia, a committee of the American Medical Association, together with a committee from the American Association of Medical Colleges is being formed to investigate the situation and make recommendations.

REPORTS OF COUNCIL COMMITTEES

The Council Committee on Committee Reorganization consisting of W. G. Elliott, J. W. Chambers, and Thomas W. Goodwin, recommends that there be no change in the Committee structure of the Medical Association of Georgia, and after completion of the reorganization of the present structure of the American Medical Association, the Medical Association of Georgia should reevaluate its standing committees and that changes be made to conform with the organizational structure of the American Medical Association.

Councilor Apportionment and Redistricting—Thomas Goodwin, Chairman, M. F. Arnold, and George T. Nicholson. The Committee has drawn up a plan which would increase the number of Councilor districts from 10 to 12 and that each county society having more than 100 members would elect an additional councilor. Furthermore, any society having 100 or more members shall elect councilors direct and for each additional 500 active members on their rolls shall elect an additional councilor. This would bring the number of Councilors to 18. The plan was referred to the MAG Constitution & By-Laws Committee.

Report of the Cultists Committee of Council—F. G. Eldridge, Chairman, Robt. L. Brown, Raymond F. Spanjer and Albert M. Deal. Attention was called to the multiplicity of bills offered by cultists in the legislature during the past two sessions on behalf of cultists organization, and the Committee states that continued diligence on the part of all members of the Medical Association of Georgia to defeat any of the cultists practices and bills introduced into the General Assembly should be made.

Council Annual Session Committee—Henry H. Tift, Macon, Chairman, Peter Hydrick, Ted F. Leigh. The

Annual Session Committee has always been very active. Report of the Committee is in fact the Program for the Annual Session, copies of which are being received by all members of the Association through the *Journal of the Medical Association of Georgia*. As the Chairman of this Committee I want to especially thank the other members of the Committee. Dr. Peter Hydrick and Dr. Ted F. Leigh have been most cooperative in every respect. I would also like to commend Dr. Herbert M. Olnick, Macon, Chairman of Local Arrangements, for his untiring efforts under the proposition that some of the Program Chairmen of Specialty Societies that resided in towns other than where the Annual Session was to be held. This has made it very difficult to have meetings which these men could attend. I would like to recommend very strongly that the specialty societies appoint a chairman each year who resides in the city in which the Annual Session will be held.

The Council Chairman commends the activity of the Annual Session Committee and recommends to your attention part of the report concerning the chairmen of the specialty societies.

Council Headquarters Building Committee—C. J. McLoughlin, Chairman, Thomas J. Anderson, and M. V. Murphy. At an Annual Session meeting of the Medical Association of Georgia many years ago, the House of Delegates adopted a resolution as follows. "Be it Resolved, by, the Council of this Association and the same is recommended and transmitted to the House of Delegates and the Association in general session at Augusta, this May 1, 1942, that the Medical Association of Georgia develop, through its Council, plans for a permanent Headquarters Building for the Association, and that the sum of \$5,000 be set aside by the Association's Secretary-Treasurer to be known as the Building Fund, the fund to be added to from year-to-year as the Association directs until a sufficient amount is available to facilitate a suitable building program."

Sixteen years ago, therefore, the need for a building to house the offices of the Association was foreseen. This Building Fund has been added to until at the present time there appears to be enough money available to proceed with plans to house the Headquarters and staff of the Medical Association of Georgia.

No definite action has been taken, but negotiations have begun with the Fulton County Medical Society to obtain a small portion of land adjacent to the Academy of Medicine upon which a two-story building can be erected. This would seem to be the most logical place for housing the Association in order that both the Society and the Association may benefit from mutual proximity. If space becomes available, it is hoped that the House of Delegates will give permission to proceed further with plans for erecting the Headquarters Building. This problem was discussed at the Columbus March 15, 16, 1958, meeting. Council approved continued negotiation, and it was voted that the Council Building Committee and the MAG President, Chairman of Council, and Chairman of Finance Committee be authorized and empowered to negotiate an agreement with the Fulton Medical Society on the Medical Association of Georgia building and land subject to ratification by the Association House of Delegates.

It is recommended that the House of Delegates approve this action of Council.

Council wishes to bring to the attention of the House of Delegates the fact that the First Vice President was given particular duties during the year 1957-58. First Vice-President was appointed chairman of the committee chairmen. During the month of October committee chairmen were called into the Headquarters Office and had a conference with T. A. Peterson, First Vice-President. The conference dealt with the various activities of the committee to what the committee chairmen had in mind for the program of that committee. Your Council believes that this is a good thing and recommends the continuation of such a program. It is suggested that during the coming year, perhaps by early September, all the committee chairmen meet under the sponsorship of the First Vice-President for a dinner in Atlanta and discuss Association affairs and the plans of their committee for the coming year.

As Chairman of Council I wish to compliment and give approbation to the excellent work of all of the Standing Committees of the Association during this past year. From the reports to Council we know the hard work that has been done. Their activities will be reported to you elsewhere.

Again, I wish to express my thanks to the officers of the Association, the Councilors, the Headquarters Staff for the excellent work during 1957-58, and we feel that it is one of the most successful years in the long history of the Medical Association of Georgia.

REFERENCE COMMITTEE RECOMMENDATION—The Committee reviewed each section of the Report of Council separately as follows:

Council Committee on Standardization of Insurance Forms—Joseph B. Mercer, W. L. Pomeroy, and Robert E. Shiflet. Similar to a recommendation of the House of Delegates at the 1957 session, the Council committee was appointed, but no report has been received.

REFERENCE COMMITTEE RECOMMENDATION—The Committee recommends the Standardization of Insurance Forms and requests the Committee on Standardization of Insurance Forms to prepare a standard form for presentation to Council at their earliest possible convenience. After such form has been accepted by Council, a copy should be sent each member for their use in having copies made. Members are urged to use this standard form in all cases of health insurance reports.

HOUSE OF DELEGATES ACTION—After discussion of this Reference Committee Recommendation on Standardization of Insurance Forms it was moved (Mercer, Glynn-Thomas, Richmond) that the last two sentences of this reference committee recommendation which read: "After such form has been accepted by Council, a copy should be sent each member for their use in having copies made. Members are urged to use this standard form in all cases of health insurance reports," be deleted from the recommendation. This motion was then approved, and the House adapted the Reference Committee recommendation on Standardization of Insurance Forms as amended, making it then read: "The Committee recommends the Standardization of Insurance Forms and requests that the Committee on Standardization of Insurance Forms prepare a standard form for presentation to Council at their earliest possible convenience."

Council Committee on Institution-Physician Relations—F. G. Eldridge, Chairman, Stewart D. Brown, Darrell Ayer, and Lee Howard, Sr., Ex-Officio. The Committee must be commended for its work on this problem. At the December 7-8 meeting of Council in Valdosta, Georgia, the following report was presented concerning ethical standards.

"(1) Adequate service guaranteed by physicians to satisfy the needs and requirements of the members of the medical staff of the hospital.

"(2) Charge for services rendered by these physicians must be in the name of the physician or physicians rendering the service.

"(3) That no employer-employee relationship exist between the hospital and the physician as such relationship is unethical and illegal.

"(4) Any arrangements made with the hospital by the physician should be of such a nature as to require payment for his professional services by Blue Shield rather than Blue Cross and this strongly recommended.

"(5) These basic principles of medical ethics so stated should apply to all hospitals admitting 'pay patients' regardless of size and to all physicians practicing in the State of Georgia."

The report was adopted by Council and is referred to the House of Delegates for approval.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Institution-Physician Relations Committee was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adapted the report of the Institution-Physician Relations Committee as recommended by the Reference Committee on motion duly made and seconded.

Report on Committee of Unauthorized Practice of Ancillary Personnel—A. M. Phillips, Macon, Chairman, Ralph W. Fowler, and W. L. Pomeroy. There have been no meetings of the above named committee during this past year. This has not been due to any negligence on the part of your committee, however, because it has not been necessary to call a meeting. No cases have been reported to your committee in which it would be necessary for action to be taken.

The very fact that there has been no necessity for meetings speak well for the membership of the Medical Association of Georgia. Indications are that at the present time all members are aware of their responsibility for any authorized act on the part of ancillary personnel.

In spite of the fact that your committee has had matters brought before it, it is the recommendation of this present committee that a committee be appointed each year to act on matters that should be brought to its attention. We suggest that this committee be made one of the permanent status.

Your Chairman of Council commends the report of the Committee on Ancillary Personnel and respectfully brings the attention of the House of Delegates to the suggestion that such committee be continued. There have been several cases in the past several years before Council concerning this matter and that is the reason Council saw fit to appoint a Council Committee to deal with it.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Committee on Unauthorized Practice of Ancillary Personnel was read and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the report of the Committee on Unauthorized Practice of Ancillary Personnel as recommended by the Reference Committee.

Report of Council Committee on Social Security Tellers—During the year, pursuant to the instructions of the House of Delegates, the Headquarters Office

mailed out ballots to every member of the Association so that the membership of the Association could vote for or against "compulsory social security." The special Council Committee of Tellers was set up to count the ballots. D. Lloyd Wood, Dalton, Chairman, A. W. Simpson, Jr., and Ralph W. Fowler. The majority of the votes cast were against compulsory social security for physicians in the state of Georgia. The total number of votes could have been larger. Apparently many physicians were either not interested or were negligent in returning the card.

REFERENCE COMMITTEE RECOMMENDATION—Report of the Council Committee on Social Security Tellers was accepted with the recommendation that the number of votes cast for and against be included in this report.

HOUSE OF DELEGATES ACTION—Adopted the Council Committee on Social Security Tellers Report as recommended by the Reference Committee on motion duly made and seconded.

(NOTE: As published in the January 1958 issue of *JMAG*, Council Meeting minutes of December 7-8, 1957, the official results of the MAG active member poll on Social Security were: 496 in favor of compulsory Social Security and 537 against compulsory Social Security.)

Report of the Council Committee on Medical School Courses—Chris J. McLoughlin, Chairman, J. Lee Walker, and Rafe Banks. A Council Committee was appointed early this year to establish a series of lectures to be entitled the Art of the Practice of Medicine. These lectures were to be on subjects related to medicine itself but having to do with various problems associated with the establishment, conduction, and maintenance of a medical practice. Twelve subjects or lectures were picked and outlined. Another meeting was held with a committee from the section on preventive medicine at Emory University. They chose six topics to be presented to senior students who felt that some of the other available topics might be covered in other departments of the school curriculum. These subjects were presented by different lectures beginning on January 25th and continuing for a total of six consecutive Saturday mornings. Attendance was fair because of the conflict in the school schedule, but a great many very favorable comments were made by students who heard the lecture, and since that date, attendance has increased.

Representatives of the Medical College of Georgia chose ten of the twelve lectures and these are being presented on alternate Saturdays. The first was given on January 25th until the end of the school year. Great interest was shown in these presentations and it is felt that they should be made a part of the regular curriculum. Attendance was very good. At the end of the school year a social hour with buffet supper will be given at each of the Medical Colleges under the sponsorship of the Mead Johnson Company, at which time copies of the lectures as presented to respective schools will be given to the students. It is felt that these lectures will be of great value to the senior students and perhaps more particularly to interns and residents who will, in the near future, be opening an office. It is recommended that the committee be encouraged to continue this program on an expanded scale if possible.

Council believes that this practical course on the Art of the Practice of Medicine is a most valuable adjunct to medical school curriculum and believes that these courses should be continued. Council would like the approval of the House of Delegates for this activity.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Council Committee on Medical School Courses was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the report of the Council Committee on Medical School Courses as recommended by the Reference Committee on motion duly made and seconded.

Report of the Council Committee on MAG Distinguished Service Award—David Henry Poer, Chairman, C. F. Holton, Savannah, Ralph H. Chaney, Augusta. The directive of Council to study and make recommendations concerning methods of bringing recognition to members of the Association who performed specially noteworthy meritorious service in the field of service to the profession has been carried out and adopted by Council at the December 7-8 meeting in Valdosta, Georgia. Rules and regulations have been set up and it will be possible for the first distinguished service award to be made at the time of the Macon Annual Session. The committee recommends the continued work of this committee under the direction of Council. The following rules were established for the distinguished service Award.

"It was recommended that a suitable award may be presented annually to a member of the Medical Association of Georgia for distinguished meritorious services which reject honor and credit to this Association and to the medical profession subject to the following rules and regulations. (1) Recommendation for this honor may be made by any component society or by a member in good standing or by the selections committee. (2) Recommendation shall be made to the President of the Association who shall act as Chairman of this Selections Committee. (3) Other members of the Selections Committee shall be secretly appointed only by the President with representatives from each Councilor district recommended by the Council. (4) The Selections Committee shall meet during or near the time of the Annual Session and the announcement of the recipient of this honor shall be made by the President during a general session to members of the Association. (5) This committee shall provide a suitable certificate or trophy not to exceed \$100.00 in value to be presented to the recipient by the President at the time of the announcement."

The Chairman of the Council respectfully requests the house of Delegates to approve the above rules and regulations as adopted by Council.

REFERENCE COMMITTEE RECOMMENDATIONS—The report of the Council Committee on MAG Distinguished Service Awards was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the report of the Council Committee on MAG Distinguished Service Award as recommended by the Reference Committee.

FINANCE

The Council Finance Committee, J. G. McDaniel, Chairman, J. W. Chambers, and Charles Andrews, have been very diligent as watchdogs in your behalf. I present here for your approval the budget for 1958:

	Budgeted Income and Disbursements	Proposed Budget for 1958
<i>INCOME</i>		
Income from Dues . . .	\$ 57,000.00	\$ 92,000.00
Journal Advertising . . .	25,000.00	32,000.00
Fees Exhibitors A.S. . .	8,750.00	10,000.00

	Budgeted Income and Disbursements	Proposed Budget for 1958
Int. & AMA	2,200.00	2,500.00
	<hr/>	<hr/>
	\$ 92,950.00	\$136,500.00
DISBURSEMENTS		
1. <i>Salaries</i>	\$ 26,675.00	\$ 27,600.00
Bonus	—	2,000.00
		<hr/>
		\$ 29,600.00
2. <i>Fixed Allotments</i>		
Pension Payments . .	\$ 1,200.00	\$ 1,200.00
Honorarium President .	1,000.00	1,000.00
Atty. Retainer . . .	1,200.00	1,200.00
Special Atty. Fees . .	—	3,500.00
Annual Audit	500.00	500.00
Cont. F.C.M.S. . . .	1,500.00	1,500.00
Ins. & Bonds Pers. . .	1,000.00	1,000.00
Woman's Auxiliary . .	1,300.00	1,300.00
Better Health Council .	1,200.00	—
	<hr/>	<hr/>
	\$ 8,900.00	\$ 11,200.00
3. <i>Journal Publication</i>		
Salaries	\$ 4,800.00	\$ 4,500.00
Bonus	—	575.00
Engraving & Cuts . .	900.00	1,500.00
Editorial Asst. . . .	150.00	150.00
Stationery	300.00	400.00
Postage	500.00	550.00
Clipping Service . .	250.00	250.00
Add. & Supplies . .	200.00	250.00
Copyright	50.00	50.00
Printing	26,000.00	32,000.00
Sales Tax	780.00	960.00
Sundry	50.00	50.00
	<hr/>	<hr/>
	\$ 33,980.00	\$ 41,560.00
4. <i>Headquarters Expense</i>		
Travel	\$ 4,000.00	\$ 4,000.00
AMA Travel; Del; Sec; & Exe. Sec.	2,000.00	3,000.00
Meetings	500.00	750.00
Stat. Print. & Sup. . .	1,500.00	1,800.00
Postage	1,500.00	1,500.00
Tel. & Tel.	2,500.00	2,500.00
Depreciation	500.00	750.00
Office Maintenance .	500.00	600.00
Dues & Sub.	200.00	200.00
Janitor Serv. & Gratui.	300.00	400.00
Payroll & Unemp. Tax .	1,400.00	1,500.00
Sundry	500.00	500.00
	<hr/>	<hr/>
	\$ 15,400.00	\$ 17,500.00
5. <i>Annual Session</i> . . .	\$ 10,000.00	\$ 12,000.00
6. <i>Committee Expenses</i>		
1. Rural Health . . .	\$ 350.00	\$ 1,600.00
2. Medical Defense . .	500.00	3,500.00
3. Legislation	1,400.00	2,150.00
4. Maternal Welfare . .	200.00	275.00
5. Industrial Health . .	100.00	—
6. Public Service . . .	1,000.00	1,800.00
7. Ins. & Economics . .	300.00	400.00
8. Awards	100.00	1,100.00
9. AMEF	100.00	—

10. Veterans Affairs . .	150.00	250.00
11. Hosp. Relations . .	150.00	1,000.00
12. Hist. & Vital Stat. .	—	200.00
13. Med. Civil Prep. . .	50.00	50.00
14. Blood Banks	50.00	720.00
15. Mental Health . . .	275.00	200.00
16. Crawford W. Long . .	100.00	1,000.00
17. Medical Education . .	100.00	—
18. Ministerial Liaison .	—	300.00
19. Tax Deduc. Ind. Care .	—	50.00
20. Med. School Course .	—	250.00
21. Dist. Serv. Award . .	—	100.00
22. Physician-Lawyer Lia.	—	500.00
23. Medicare Conference .	—	100.00
24. AMA Delegates Meeting	—	500.00
	<hr/>	<hr/>
	\$ 4,925.00	\$ 16,045.00
Equipment	\$ —	\$ 500.00
	<hr/>	<hr/>
	\$ —	\$ 500.00
Total Disbursements . .	\$ 99,990.00	\$128,405.00
Contingent Fund Deficit .	6,930.00	
Bank Balance	—	—
1958 Contingent Fund . .	—	\$ 2,800.00
1958 Reserve Fund . . .	—	\$ 5,295.00

The Association, due to an increase in dues determined by the 1957 House of Delegates is in excellent financial standing and able to expand its facilities and activities. The Council Chairman must admit that he was wrong in his estimate that the Association would be several thousand dollars in the red in 1957. If you will check the Treasurer's report you will see that we came out in the black. This was due to several factors. The two most important of which was (1) several committees of the Association with large appropriations did not spend their funds and the secretary's honorarium was decreased and (2) the *Journal* instead of breaking even made a profit. This profit was due to increased receipts from advertising. Consequently the Association at the end of the year 1957 had \$2,797.36 to the good.

REFERENCE COMMITTEE RECOMMENDATION—The MAG Budget was reviewed and recommended for adoption.

HOUSE OF DELEGATES ACTION—Adopted the MAG Budget as recommended by the Reference Committee on motion duly made and seconded.

Constitution and By-Laws

THOMAS W. GOODWIN, M.D., Augusta, *Chairman*

The Constitution and By-Laws Committee met February 1, 1958, to consider proposed changes in the Constitution and By-Laws of the Association as referred to the Committee by the Council and other Committees. These changes were given due consideration and the Constitution and By-Laws Committee recommendations on these matters will be discussed item by item as follows:

The Council Committee on Councilor Apportionment and Redistricting referred a recommendation to the Constitution and By-Laws Committee concerning the redistricting of the state of Georgia into 12 councilor districts (formerly 10 councilor districts) and increasing the number of Councilors representing these districts

to 12 (formerly 10). The report further recommended that the Councilor Apportionment be changed to stipulate that county medical societies having 100 or more active members would elect their own Councilor to represent them under this plan. As stated then, there would be 12 councilors of the 12 newly proposed councilor districts, and five councilors from the societies have 100 or more members (which are: Fulton—Atlanta; Bibb—Macon; Muscogee—Columbus; Richmond—Augusta; and, Georgia Medical Society—Savannah). The report further proposed that any society having 100 or more members shall elect councilors direct and for each additional 500 active members on their rolls, they shall elect an additional councilor. These recommendations then would bring the number of councilors to 18 (formerly 10). The proposed changes in the Constitution & By-Laws to permit this are as follows:

NOW READS:

Article VI. Council. Section 1. Composition. The Council is composed of the President, the President-Elect, the Immediate Past President, two Vice - Presidents, Secretary, Speaker of the House of Delegates, and 10 Councilors as provided for in the By-Laws. The Treasurer, Editor of the *Journal*, Executive Secretary and Delegates to the AMA shall be ex-officio members of Council without the right to vote. Vice-Councilors shall be ex-officio members except in the absence of their respective Councilors as provided for in the By-Laws. The Vice-Speaker shall be an ex-officio member except in the absence of the Speaker as provided for in the By-Laws.

SHOULD READ:

Article VI. Council. Section 1. Composition. The Council is composed of the President, the President-Elect, the Immediate Past President, two Vice-Presidents, Secretary, Speaker of the House of Delegates, and 18 Councilors as provided for in the By-Laws. The Treasurer, Editor of the *Journal*, Executive Secretary and Delegates to the AMA shall be ex-officio members of Council without the right to vote. Vice-Councilors shall be ex-officio members except in the absence of their respective Councilors as provided for in the By-Laws. The Vice-Speaker shall be an ex-officio member except in the absence of the Speaker as provided for in the By-Laws.

NOW READS:

Article IX. Officers. Section 1. Designation. The officers of the Association shall be a President, President-Elect, two Vice-Presidents, the Immediate Past President, the Secretary, the Speaker of the House of Delegates, the Vice-Speaker of the House of Delegates, 10 Councilors and 10 Vice-Councilors as provided for in the By-Laws.

SHOULD READ:

Article IX. Officers. Section 1. Designation. The officers of the Association shall be a President, President-Elect, two Vice-Presidents, the Immediate Past President, the Secretary, the Speaker of the House of Delegates, the Vice-Speaker of the House of Delegates, 18 Councilors, and 18 Vice-Councilors as provided for in the By-Laws.

NOW READS:

Chapter VI. Council. Section 1. Composition. The Council is composed of the President, the President-Elect, the Immediate Past President, two Vice-Presidents, Secretary, Speaker of the House of Delegates or the Vice-Speaker of the House of Delegates, and one Councilor or Vice-Councilor from each Councilor district. Vice-Councilors shall be ex-officio members of Council, without the right to vote, except in the absence of their respective Councilors when they shall serve as Councilors. The Vice-Speaker shall be an ex-officio member of the Council without the right to vote except in the absence of the Speaker when he shall serve in the Speaker's stead. Treasurer, Editor of the *Journal*, Executive Secretary, and Delegates to the AMA shall be ex-officio members of Council without the right to vote.

SHOULD READ:

Chapter VI. Council. Section 1. Composition. The Council is composed of the President, the President-Elect, the Immediate Past President, two Vice-Presidents, Secretary, Speaker of the House of Delegates or the Vice-Speaker of the House of Delegates, and one Councilor or Vice-Councilor from each councilor district. Component county medical societies having 100 or more active members shall be entitled to elect one Councilor and one Vice-Councilor directly representing that Society. Component county societies shall furthermore be entitled to elect one additional Councilor and one additional Vice-Councilor for each additional 500 active members on their rolls. In these elections, only the members of the component county medical societies involved shall be allowed to vote. In those districts which contain the large county medical society having 100 or more active members only those members residing in the district outside the large county medical society may vote for the Councilor representing that district. Fulton County shall be considered as an entity in itself and shall not be considered as a district. Vice-Councilors shall be ex-officio members of council without the right to vote, except in the absence of their respective Councilors when they shall serve as Councilor. Vice-Speaker shall be an ex-officio member of Council without the right to vote except in the absence of the Speaker when he shall serve in the Speaker's stead. The Treasurer, Editor of the *Journal*, Executive Secretary and Delegates to the AMA shall be ex-officio members of Council without the right to vote.

The Councilor Apportionment and Redistricting Committee referred the above recommendation to the Council and the Council approved this report and referred it to the Constitution & By-Laws Committee. As these changes affect both the Constitution and By-Laws, your Constitution & By-Laws Committee recommends that the changes in the Constitution be given their first reading, as prescribed in the Constitution & By-Laws, Chapter VIII, Amendments, at this 1958 Session of the House of Delegates and that they be voted on at the 1959 Session of the House of Delegates. It is further recommended that the recommended changes in the By-Laws pertinent to this redistricting and councilor apportionment be considered only and that the By-Law changes be presented to the 1959

Session of the House of Delegates at the same time the vote on the Constitution changes is registered. In this way, the action on this matter will be taken concurrently.

The Association Council referred to the Constitution & By-Laws a suggested additional section to the By-Laws titled "Jurisdiction" that would provide that physicians having their predominant practice in the area of a county medical society jurisdiction join that particular county society. After conferring with legal counsel, your constitution & By-Laws Committee recommends the addition of Section X to be titled Jurisdiction to the present Chapter I of the By-Laws. This section would read as follows:

ADDITIONAL SECTION TO CHAPTER I

Chapter I. Membership. Section 10. Jurisdiction. It shall be the policy of this Association and its component county medical societies that its members shall belong to the component county medical society having jurisdiction of the county of their predominant practice. When no such component county medical society has jurisdiction of the county in which a member has his dominant practice, such member shall belong to a component county medical society having jurisdiction of a county adjacent to the county in which the Member has his dominant practice.

Your Committee further recommends a proposed reorganization of the present Association Standing Committee titled Public Health Committee. It is believed that by decreasing the number of members of the Committee on Public Health, a more effective function can be performed and should the membership of the Committee need to be enlarged, it could be accomplished by the Committee appointing subcommittees to carry out certain aspects of the Committee on Public Health work. Your Constitution & By-Laws Committee then proposes the following change in the By-Laws, Chapter X, Standing Committees, Section 3(f) as follows:

NOW READS:

Chapter IX. Standing Committees. Section 3(f) Committee on Public Health. The Committee on Public Health shall be composed of a chairman and a member of the Georgia State Department of Health appointed by the Executive Committee of Council of the Medical Association of Georgia and the chairman of each of the following Association committees: Industrial Health; Rural Health; Hospital Relations; Legislation; Medical Civil Preparedness; Mental Health; Crippled Children; Maternal and Infant Welfare; Geriatrics; Cancer; Insurance and Economics; and Blood Banks. The chairmen of these committees shall then automatically be members of the Association's Public Health Committee and shall select an alternate member from each of their respective committees to represent them at Public Health Committee meetings in the absence of the chairman. It shall be the duty of the Public Health Committee to meet at least annually to hear reports from the committee chairmen members so named, to correlate their activities and to act as a "clearing house" for any matters concerning public health. It shall also be the duty of the Public Health Committee to

correlate these activities with the Georgia Department of Public Health.

SHOULD READ:

Chapter IX. Standing Committees. Section 3(f) Committee on Public Health. The Committee on Public Health shall be composed of a chairman and four members and a member of the Georgia State Department of Public Health to serve in an ex-officio capacity in this Committee. It shall be the duty of the Public Health Committee to meet at least annually and to act as a "clearing house" for any matter concerning Public Health. It shall also be the duty of the Public Health Committee to correlate their activity with the Georgia Department of Public Health.

Your Committee took cognizance of a recommendation from the Secretary's report introduced in the 1957 House of Delegates concerning the matter that no two Vice-Presidents should be elected from the same city serving concurrently as first and second Vice-President of the Association. While the Constitution and By-Laws Committee believes in principle with this recommendation, it is felt that such stipulations do not come within the scope of the Constitution and By-Laws but are merely recognized rules of procedure.

As Chairman of the Constitution & By-Laws Committee I wish to thank the other members of my Committee for their sincerity and interest in the work undertaken by this committee during the year 1957-58.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Constitution and By-Laws Committee was read. The Committee recommends that the section having to do with redistricting and apportionment be approved for first reading and that the pertinent By-Laws be held in abeyance until the second reading of the proposed Constitutional changes.

The Reference Committee further recommends that changes in the By-Laws be as follows: The addition of Section X to be titled "Jurisdiction" to the present Chapter I of the By-Laws, and, under Standing Committees, Chapter IX of the By-Laws, Section 3(f) Committee on Public Health be changed to read as recommended in the report.

HOUSE OF DELEGATES ACTION—Adopted the report of the Constitution and By-Laws Committee as recommended by the Reference Committee on motion duly made and seconded.

Public Health

HUGH J. BICKERSTAFF, M.D., Columbus, *Chairman*

The Committee on Public Health is a correlation and general liaison committee without specific regular functions, being composed of ex-officio members who are chairmen or representatives of various special committees on health and related subjects, each of which committees have their own special functions. Therefore, the Committee on Public Health meets only on call rather than regularly.

There was held one called meeting on 9/15/57. Nine of the twenty-one members were present. The business transacted by the committee was discussion of the predicted epidemic of Asian flu anticipated for the fall and winter. Result of the deliberation was an outline of approved policies for the Association and the Georgia Department of Public Health and circularization by letter and by publication in *Journal* to all members of the Association and a statement concerning Asian influenza and the vaccine which was released to the public through the ordinary press channels. There

was no other business transacted by the committee during the year.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Public Health Committee was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the report of the Public Health Committee as recommended by the Reference Committee on motion duly made and seconded.

Report of Mental Health Committee

RIVES CHALMERS, M.D., Atlanta, *Chairman*

The activities of the Mental Health Committee for 1957-58 have consisted primarily of providing a sub-committee to work with representatives of the Georgia Psychiatric Association and Georgia Association of Mental Health. The group developed proposals for legislation to improve care and treatment of the mentally ill, to promote the development of a strong preventive mental health program, and to provide for training of professional mental health personnel. These proposals are reflected in the recent mental health legislation enacted by the Georgia Legislature. In addition to the above activity, the committee held two meetings. At one meeting the professional relationship between the medical profession and psychologists licensed to practice psychology in this state were discussed. No definite action regarding this relationship has been formulated, and the matter will be considered further.

At the other meeting, Dr. Fred Simonton, President of Georgia Academy of General Practice met with us to discuss plans for the development of postgraduate courses in care and treatment of the mentally ill for physicians in general practice and practicing specialties other than psychiatry. A liaison committee of these two organizations will be appointed in the coming year to develop a series of such programs for physicians in Georgia.

This Committee plans for the coming year to continue to work toward continued improvement in facilities, services and training related to care and treatment of the mentally ill in Georgia. A major emphasis will be on the development of postgraduate courses for physicians in local communities to promote early diagnosis and treatment of the mentally ill in their home communities.

REFERENCE COMMITTEE RECOMMENDATION—The report on Mental Health was read and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the Mental Health Committee report as recommended by the Reference Committee on motion duly made and seconded.

Report of Crippled Children's Committee

JACK C. HUGHSTON, M.D., Columbus, *Chairman*

Further advances have been made in the care of the crippled and handicapped children of our state during the year of 1958. Naturally, these advances are never as great as all of us would desire.

The Crippled Children's Division of the Public Health Department has recently appointed a new Director of the Crippled Children's Division, this being Dr. Yarbrough. The physicians working with that program are delighted to have a full time director for the program though the considerable attention given by Dr. Rice will be missed.

The Georgia Chapter of the National Association of Crippled Children and Adults has, during 1958, worked

with the doctors in Albany and Dougherty County to help establish, under the direction of their county medical association, a treatment center for direct services to persons in this region on prescription of the attending physician. This is a definite step forward in bringing rehabilitation to persons not living directly in the metropolitan centers. Also, this society has continued its excellent program of scholarships to Georgians in the phases of attending schools in speech therapy, occupational therapy, physiotherapy, and then less extensive postgraduate courses. The return of many of these persons to the state to carry on and render these services helps greatly.

As regards the progress with the program outlined by the DuPont Nemours Foundation to you last year, we have not made a great deal of progress. Nothing of a definite nature has yet transpired. As you will remember, the proposal of this foundation was that they would help us in funds for the aid of crippled and handicapped children in the un-met areas within the state. It will be necessary for us as various groups to coordinate our activities in order to prevent the duplication of services rendered to these children, so that any funds from this or any other foundation will not be unwisely expended. We were working along this line prior to the time of the meeting with the DuPont Nemours Foundation and want very much to accomplish this end as soon as possible though it may take us a few more years to do so.

It is anticipated that a continued progress will be in evidence in the services rendered to the crippled and handicapped children, and it is always the aim of the physicians associated with the various organizations and treating patients under the auspices of the various organizations to stay in close contact by mail with the family physicians of these patients. We all appreciate any negligence on our part in this line of thought being brought to our attention by the family physician.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Special Committee on Crippled Children was recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the Special Committee on Crippled Children report as recommended by the Reference Committee on motion duly made and seconded.

Lectureships

DAVID HENRY POER, M.D., Atlanta, *Chairman*

The work of this Committee has been carried out on schedule, and at the Annual Session, the Floyd Wilcox McRae Lecture will be given by Dr. Edwin D. Harrison, President, Georgia Institute of Technology, and the Jonte Equen Lecture will be given by James R. Maxfield, Jr., Dallas, Texas.

Also, rules and regulations establishing a definite plan of management by the House of Delegates of the Association for all Memorial Lectureships have been recommended to Council (adopted December, 1957).

Recommendations: Continue work of this Committee under direction of Council.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Special Committee on Lectureships was read and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the Special Committee on Lectureships report as recommended by the Reference Committee on motion duly made and seconded.

Headquarters Office Report

MR. MILTON D. KRUEGER, *Executive Secretary*
MR. JOHN F. KISER, *Associate Executive Secretary*

It is with pleasure that we bring you our fifth annual report of activities of the Association for the year of 1957-58. In general, this year has been characterized by the rapid growth in personnel, routine work, and special projects. Though many of medicine's basic problems remain unsolved, 1957-58 can be singled out as a most unusual year of accomplishment.

In the Secretary's Report for 1952, the major problems confronting the Association at that time were listed as follows: Nursing shortage; basic science law; improved and more economical methods of treatment of the mentally ill, including establishment of screening centers in Atlanta and Augusta; increase in number of new physicians in rural areas; enforcement of a fair Doctor Draft Law; policies to be followed in the new state general hospital in Augusta; and care of chronically ill patients in the state. It is incredible how fast time flies and yet how slowly the wheels of progress move. Most of these 1952 problems are with us today. The only difference is that more members are aware of these problems than they were then.

1957-1958 has been a busy year and the many achievements and activities can be found in the officers and committee reports. To continue to meet the demands and challenges facing organized medicine today will require increased activity on the part of the members, officers, committees, and staff. Two items are of particular importance; we will need more personnel as activities and services expand and at the present time there is considerable need for suitable office facilities for the Headquarters staff and equipment.

PERSONNEL

As the Association is a "service" organization, the number of persons employed by the Association should be directly proportionate to the volume of work undertaken by the Association. At the present time staff assignments exceed the ability of the staff to carry out these activities in a most expeditious and efficient manner. Should the Association continue this high degree of activity, the efficiency will markedly decrease as a "breaking point" is reached. General staff assignments are as follows: Mr. M. D. Krueger, Executive Secretary—House of Delegates, Council Executive Committee of Council, Officers, 8 active committees, annual session, office management; Mr. John F. Kiser, Associate Executive Secretary—Field travel, public relations, legislation, 9 active committees, special projects; Miss Helen Hendry, *Journal* Managing Editor—administration management of the *Journal of the Medical Association of Georgia*; Miss Thelma Franklin—Bookkeeping and membership records; Mrs. Myrtice Mulligan—Secretary and special projects; Miss Jane Cotter—Office secretary and office projects. The Medicare Department of the Association is ably administered by Mr. John Arndt heading a staff of three assistants who receive and process Medicare claims under the direction of the MAG Review Board, Council Executive Committee and the Department of the Army. The employment and personnel policies as approved by council have been greatly appreciated by Headquarters Office staff members.

Recommendation: That the endorsement of the

House of Delegates be given the Executive Committee of Council to employ additional staff personnel as needed to insure the efficient function of the Headquarters Office in meeting all duties and assignments.

HEADQUARTERS OFFICE FACILITIES

In establishing an office staffed by 10 persons, a great deal of thought should be devoted to facilities. The Housing of the Headquarters Office directly affects the productivity of the staff and Association members using this facility. While the present site of the Headquarters Office may have sufficed for three or four staff members in earlier years, it now has become obsolete for ten employees, Association officers, storage, and equipment. Further, it is presently inadequate for Council, committee meetings, or even small conferences. The space occupied by the Headquarters Office in no way serves present needs and stifles effective function and future planning. Council, cognizant of this inadequacy, appointed a Building Committee to study this problem. Even office furniture has become decrepit and the problem has been highlighted by the return of a conference table and six chairs to the source from which the Association borrowed this furniture, now leaving a further liability to overcome.

Recommendation: That the House of Delegates empower the Council, with due study of the problem, to provide suitable quarters for the Headquarters Office of the Association, using the Association Building Fund for that purpose as proposed and approved by this same House, May 1, 1942, in a resolution as follows: "That the Medical Association of Georgia develop, through its Council, plans for a permanent Headquarters Building for the Association . . ."

MAG ORGANIZATIONAL OPERATING PROCEDURES

As Association activity becomes broader in scope, more complex and necessarily more detailed, following the established standard MAG operating procedures, for members of the House of Delegates, members of Council, members of Council committees, members of Standing and Special committees and County Medical Society officers, would aid these leaders of the profession in utilizing the services of the Headquarters Office staff. A series of booklets published by the Association and distributed to these various officials could give instruction and information on the MAG standard operating procedures in these capacities. Titles of the booklets would be self-explanatory such as "MAG Delegates Procedural Guide," "Procedural Information for Councilors," "Serving on an MAG Committee," "Responsibilities of a County Medical Society President and Secretary." By presenting this information to the appropriate persons, an efficient standard of statewide activity could be maintained with uniformity. In this way medical leaders in the state would know better how to use Headquarters Office and less time would be spent in "breaking in" leadership, learning the procedural "rules of the road"; leaving more time for actual policy-making.

Recommendation: That the House of Delegates approve the preparation of such informative booklets for distribution to present and future leaders in the organization; the material in each booklet in this proposed series subject to the approval of Council.

STAFF ADMINISTRATIVE FUNCTION

The Executive Secretaries express their appreciation

to the Executive Committee of Council for their interest and concern in solving the many problems arising in the Headquarters Office. Special appreciation is given to Secretary Chris J. McLoughlin for his day-to-day guidance in the conduct of the affairs of the Association and to President W. Bruce Schaefer for his continued and untiring leadership.

The increase in Association activity requires the duties assigned each Headquarters Office staff member to become more involved and varied. To facilitate efficient function, the relegated duties and responsibilities of each staff member should be generally defined. By so doing, each employee would have a clearer idea of his actual function and responsibility, eliminating duplication and misunderstanding and clarifying their authority and direct responsibility. This suggestion follows the pattern recently set by the reorganization of the AMA Staff for more efficient administrative function.

Recommendation: That the House of Delegates request Executive Committee of Council to consider a "job specification chart" delineating the general duties and responsibilities for the employees of the Headquarters Office staff.

APPRECIATION

In closing this report, the Executive Secretaries wish to express their sincere appreciation to the physician "who cared," in that with his cooperation many of the Association ideals and objectives have been achieved.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Headquarters Office was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted the Headquarters Office report as recommended by Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. G

INDEMNITY-TYPE MEDICARE PROGRAM

GEORGE R. DILLINGER, M.D., Thomasville

On the authority of Council action of Saturday, April 26, 1958, the Council approves and strongly recommends that the House of Delegates approve the following resolution:

WHEREAS, the doctors of medicine of the state of Georgia are convinced that under Public Law 569, 84th Congress, an indemnity-type plan for Medicare is permissible, and

WHEREAS, the physicians of Georgia take exception to the imposition of a service type program, and

WHEREAS, the physicians of Georgia believe sincerely that a service type Medicare program interferes in principle and in practice with doctor-patient relationship and contributes to the deterioration of good medical practice.

NOW, THEREFORE BE IT RESOLVED that the Medical Association of Georgia pursue whatever course of action is deemed necessary to obtain an indemnity-type Medicare program for the state of Georgia.

REFERENCE COMMITTEE RECOMMENDATION—The Supplementary Report of Council No. G: Indemnity-Type Medicare Program was approved with the recommendation that members of the MAG be admonished to make their fees conform to the prevailing fee in their locality, services rendered, and the ability of the patient to pay.

HOUSE OF DELEGATES ACTION—Adopted the Supplementary Report of Council No. G: Indemnity-Type Medicare Program as recommended by the Reference Committee on motion duly made and seconded.

Resolution No. 7: Medicare

Glynn County Medical Society Delegation

WHEREAS, political medicine appears to be a reality in the form of Medicare, and

WHEREAS, it appears that there will be continued effort on the part of certain Congressmen to include other groups under the program, and

WHEREAS, this appears a threat to the independent private practice of medicine

NOW THEREFORE BE IT RESOLVED that the House of Delegates directs the Council of the Medical Association of Georgia to continue its efforts toward an indemnity type program but that so long as a full service type program is in effect that all fees negotiated be applicable to all physicians on the same fee scale.

REFERENCE COMMITTEE RECOMMENDATION—Resolution No. 7 on Medicare was approved with the addition of the phrase "as is presently done" so that the last sentence reads as follows: "NOW

THEREFORE BE IT RESOLVED that the House of Delegates directs the Council of the Medical Association of Georgia to continue its efforts toward an indemnity type program but that so long as a full service type program is in effect that all fees negotiated be applicable to all physicians on the same fee scale as is presently done."

HOUSE OF DELEGATES ACTION—Adopted Resolution No. 7: Medicare as amended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. H

AMA MEDIATION COMMITTEE

GEORGE R. DILLINGER, M.D., Thomasville, Chairman

On authority of Council action of Saturday, April 26, 1958, the Council approves and respectfully recommends that the House of Delegates approve the following resolution:

WHEREAS, in many states diversity of opinion arises between state and local medical organizations and the medical schools concerning ethics and other matters involving the practice of medicine, and

WHEREAS, these problems are often aired in the public press and in the courts to the detriment of American medicine

NOW, THEREFORE BE IT RESOLVED by the Council and the House of Delegates of the Medical Association of Georgia that the Board of Trustees of the American Medical Association be authorized by the AMA House of Delegates to give thought and consideration to the setting up of a permanent mediation committee or board, to be set up jointly by the American Medical Association and the Association of American Medical Colleges and that board or committee be available, when requested by the local medical organization of the Medical Association or medical college for the purpose of mediating such difficulties.

AND, BE IT FURTHER RESOLVED THAT the Council and the House of Delegates of the Medical Association of Georgia authorize their delegates to the American Medical Association to introduce this resolution to the House of Delegates of the American Medical Association at the coming San Francisco session.

REFERENCE COMMITTEE RECOMMENDATION—The Supplementary Report of Council No. H: AMA Mediation Committee was accepted and recommended for approval. The Reference Committee further recommends that a letter commending Dr. Leonard Lorson, Chairman of the AMA Board of Trustee Mediation Committee, working on the Tolmudge Hospital, be written and so stated in the meeting of the House of Delegates.

HOUSE OF DELEGATES ACTION—Adopted the Supplementary Report of Council No. H: AMA Mediation Committee and the additional recommendation of the Reference Committee concerning the letter of commendation to Dr. Leonard Larson on motion duly made and seconded.

Resolution No. 4: Time and Place of Annual Session

J. FRANK WALKER, FOR FULTON COUNTY DELEGATION

WHEREAS, many potential technical exhibitors prepare their budgets a year in advance, and

WHEREAS, many scientific exhibits require many months of preparation, and

WHEREAS, many potential speakers are engaged more than a year in advance

BE IT THEREFORE RESOLVED, that the Medical Association of Georgia set the time and place of its Annual Session two (2) years in advance.

REFERENCE COMMITTEE RECOMMENDATION—Resolution No. 4: Time and Place of Annual Session was amended to read: "BE IT THEREFORE RESOLVED that the Medical Association of Georgia set the time of its Annual Session two years in advance." The Committee felt that the place mentioned was not too important because it is usually known two years in advance.

HOUSE OF DELEGATES ACTION—Adopted Resolution No. 4: Time and Place of Annual Session as amended by the Reference Committee on motion duly made and seconded.

Resolution No. 6: Notice of Meetings

GLYNN COUNTY MEDICAL SOCIETY DELEGATION

WHEREAS, more and more matters of importance to the Physicians of Georgia are arising daily, and

WHEREAS, it is to the benefit of the entire Medical Association of Georgia to have large numbers of physicians attend meetings called to consider these, and

WHEREAS, it is increasingly difficult for those traveling long distances to attend meetings on short notice

NOW THEREFORE BE IT RESOLVED, that the House of Delegates of the Medical Association of Georgia directs that meetings called for any reason be given fourteen (14) days notice unless deemed an emergency by the Chairman of Council.

REFERENCE COMMITTEE RECOMMENDATION—Resolution No. 6; Notice of Meetings was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted Resolution No. 6: Notice of Meetings as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Council No. B
MAG HEADQUARTERS BUILDING

GEORGE R. DILLINGER, M.D., Thomasville

On authority of Council action April 26, 1958, the Council recommends to the House of Delegates that Council be empowered to proceed with the purchase or lease of suitable property for an MAG Headquarters Office building and further be empowered to make contractual arrangements for the erection and maintenance of said building.

REFERENCE COMMITTEE RECOMMENDATION—The Supplementary Report of Council No. B: MAG Headquarters Building was accepted and recommended for approval.

HOUSE OF DELEGATES ACTION—Adopted Supplementary Report of Council No. B: MAG Headquarters Building as recommended by the Reference Committee on motion duly made and seconded.

It was moved by Chairman of Reference Commit-

tee No. 3 Thomas J. Anderson, Jr., and duly seconded that the report of Reference Committee No. 3 be accepted as amended as a whole and it was so ordered.

Report of Reference Committee No. 4

W. L. Pomeroy, M.D., Waycross, Chairman

(The following reports as presented to this Reference Committee are printed in full with the Reference Committee's recommendation and the action pursuant to it taken by the House of Delegates.)

Reference Committee No. 4 met at 2:30 p.m., April 28, 1958, in Room 720, Hotel Dempsey, Macon, Georgia. Members present were W. L. Pomeroy, Waycross, Chairman; J. H. Yeomans, Jesup, Vice-Chairman; Linton H. Bishop, Jr., Atlanta, Secretary; T. A. Peterson, Savannah; H. E. Griggs, Conyers; James A. Green, Athens; A. V. Gafford, Rome; S. A. Roddenbery, Columbus; Charles G. Bellville, Bainbridge; and F. A. Sams, Jr., Fayetteville.

First District Councilor

CHARLES T. BROWN, M.D., Guyton

Following the elevation of our Councilor Lee Howard, Sr., to the office of President-Elect of the Medical Association of Georgia, I have been permitted to serve as your Councilor for his unexpired term. To date I have attended all meetings of the Council, and expect to attend the next scheduled meeting March 15 and 16, 1958 in Columbus, Georgia. Having served eleven years as Vice-Councilor to Dr. Howard, and one year as your Councilor, I wish to say that it has been a genuine pleasure to serve with men of such high caliber, and I appreciate this honor and privilege.

The first district is composed of eighteen counties and eight component medical societies. It is gratifying to observe the continued interest shown in the annual meeting of the First District Medical Society each Spring in Statesboro, Georgia. This meeting is well attended and the scientific programs are excellent. The total membership of the eight component medical societies comprising the First District is as follows:

Counties	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Bulloch-Candler-				
Evans	21	18	19	15
Burke	8	5	9	7
Emanuel	6	6	6	6
Ga. Medical Society .	149	135	143	131
Jenkins	3	3	3	3
Screven	6	5	6	5
Southeast Georgia .	22	16	20	16
Tri Liberty-				
Long-McIntosh . .	2	2	2	2
	217	190	208	185

Gain in MAG members past year 9
Gain in AMA members past year 5

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 accepts the report of the Councilor of the First District.

HOUSE OF DELEGATES ACTION—Adopted the report of the First District Councilor as recommended by the Reference Committee on motion duly made and seconded.

Second District Councilor

GEORGE R. DILLINGER, M.D., Thomasville

Medical Societies in the Second District have shown a great deal of increased activity during the past year, while the over-all membership has only increased one, there has been an increase in AMA members of eleven. Those local society meetings that the Councilor has been able to attend have had excellent scientific programs and there is a great deal of increased interest in Medical organization in general.

There are still two county societies in the district that are too small for efficient functioning and to have efficient medical society organization. Grady county has a total of seven members in two communities and Worth County has a total of six members. The Councilor would suggest that the members in Grady County consider amalgamation with either Thomas-Brooks or Decatur-Seminole, and that the members of Worth County Medical Society consider joining with Tift County. This is merely a recommendation that we believe the physicians in those two counties should consider.

The Second District Medical Society set up a legislative committee in their fall meeting of 1957 and during this last legislative session the members of this committee worked very efficiently with the MAG headquarters office in legislative matters.

The district meetings during the past year have had excellent scientific programs and have been well attended. On the whole, we believe that the Second District Medical Society activities are increasing year by year.

Counties	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Colquitt	16	13	16	13
Decatur-Seminole . .	17	15	17	14
Dougherty	40	27	40	25
Grady	7	5	7	4
Mitchell	12	8	12	8
Southwest Georgia .	14	11	14	12
Thomas-Brooks . . .	38	34	37	30
Tift	15	13	15	9
Worth	6	4	6	4
	165	130	164	119

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 accepts the report of the Councilor of the Second District.

HOUSE OF DELEGATES ACTION—Adopted the report of the Councilor of the Second District as recommended by the Reference Committee on motion duly made and seconded.

Third District Councilor

W. G. ELLIOTT, M.D., Cuthbert

The Third District has nine organized Societies. There has been little change in the physician population. In fact there is only one additional physician in 1957 over 1956. There were 198 Medical Association of Georgia members in 1956 and 199 in 1957. There were 174 American Medical Association members in

1956, and 177 American Medical Association members in 1957.

There has been no special activity in the Third District. Most of the societies meet only occasionally. The Muscogee County Society is quite active, having good programs several times during the year, and always having outstanding speakers for their programs. They publish a very good monthly bulletin. The other societies are relatively small and as well as I can ascertain they are all relatively inactive, having only occasional programs.

The Third District has two district meeting each year, in November and usually in April or May. The November meeting was held in Columbus and was well attended, and a good program was given. The April meeting is scheduled to be held in Americus.

The following is the Third District membership for December 31, 1957, and December 31, 1956, showing Medical Association of Georgia, and American Medical Association membership for each Society:

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Ben Hill-Irwin				
Francis Ward, Fitzgerald	11	10	10	9
Flint				
O. K. Coleman, Cordele	17	16	18	18
Peach Belt				
Wm. G. Tolbert, Jr., Warner Robins . .	16	16	12	12
Muscogee				
Robert H. Vaughan, Columbus	104	96	106	95
Ocmulgee				
Reid Gullatt, Cochran	14	10	14	9
Randolph-Terrell				
Robert B. Martin, III Cuthbert	13	9	13	9
Sumter				
Frank Wilson, Leslie	18	4	18	17
Taylor				
E. O. Whatley . . .	5	4	5	5
Wilcox	1	—	2	—
	199	177	198	174

Third District Vice-Councilor

LUTHER H. WOLFF, M.D., Columbus

The Vice-Councilor of the Third District was active in contacting legislators and urging them to act on the various bills relating to medical matters as set forth by the Medical Association of Georgia.

The Vice-Councilor also attended three or four Council Meetings during the year and also attended District Meetings.

Supplementary Report of Third District Councilor No. C

THIRD DISTRICT COUNCILOR

W. G. ELLIOTT, M.D., Cuthbert

After making my annual report in March, I received

further information concerning two of the Societies in the Third District.

The Peach Belt Society had 12 meetings during 1957, and had scientific programs at each meeting, and had two social affairs with their wives during the year. This seems to be a very active society.

The Sumter County Society was very active during 1957, having monthly meetings except during the summer months. They had scientific programs at six of their meetings and met with the State Legislators at the November meeting.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 accepts the report of the Third District Councilor and Vice-Councilor and Supplementary Report of the Third District Councilor No. C.

HOUSE OF DELEGATES ACTION—Adopted the report of the Third District Councilor and Vice-Councilor and the Supplementary Report of the Third District Councilor No. C as recommended by the Reference Committee on motion duly made and seconded.

Hospital Relations Committee

MILFORD B. HATCHER, M.D., Atlanta, *Chairman*
DAVID HENRY POER, M.D., Atlanta, *Co-Chairman*

Again the year has been more of a liaison with meetings held with the Division of Hospital Services of the State Department of Public Health, Georgia Hospital Association, and the various intra-professional groups of the Medical Association of Georgia.

The Committee was broken down into sub-committees, namely:

- 1. Hospital minimum standards.
- 2. Medical allied services.
- 3. Liaison with the Physicians Institutional Relations Committee.
- 4. Liaison with the Georgia Hospital Association, Georgia Trustees Association, etc.

After several conferences it is finally proposed that there be formed the Georgia Hospital—Medical Council as follows:

GEORGIA HOSPITAL—MEDICAL MEDIATION COUNCIL

Note: This is a form of liaison at state level, for specific purposes, as recommended by a drafting committee composed of representatives of the below listed organizations. It is for formal adoption as outlined, or with modifications, by the respective parent groups.

Purposes

- 1. To provide a representative council available for local situations, upon request, for advice and consultation regarding local organizational problems;
- 2. To develop educational programs for improvement of medical-administrative-trustee relations at hospital level;
- 3. To develop proposed professional and administrative objectives for small hospitals;
- 4. To stimulate and assist small hospitals to attain acceptable standards, and
- 5. To study means of giving suitable recognition to small hospitals for attainment of improved standards.

Membership

<i>Organization</i>	<i>Representatives on Council</i>
Georgia Hospital Assn.	2
Medical Association of Georgia	2

Ga. Assn. of Hospital Governing Boards . . .	2
Ga. Chapter, American College of Surgeons . .	1
Ga. Chapter Academy of General Practice . .	1
Ga. Dept. of Public Health	1
<i>Meetings</i>	

Quarterly, on first Sunday of March, June, September, and December (beginning with the first Sunday in June, 1958) at 2:30 P.M. in offices of the Medical Assn. of Ga., 875 W. Peachtree St., N.E., Atlanta, Ga.; and additional call meetings at the discretion (including time and place) of the Chairman.

Chairmanship

At its first regular quarterly meeting of each calendar year the Council will elect a Chairman from its membership. A Chairman may not succeed himself in office. Office and secreterial functions will be rotated annually between the Georgia Hospital Assn. and the Medical Assn. of Georgia beginning in 1958 with the Georgia Hospital Assn.

Finances

Office expense (communications, stationery, supplies, postage, etc.) will be borne jointly by the Medical Assn. of Georgia and the Georgia Hospital Assn., with initial appropriations of \$100 each for the year 1958.

Supplementary Report of Hospital Relations Committee No. E

HOSPITAL RELATIONS

MILFORD B. HATCHER, M.D., Macon

Since sending in the report for the House of Delegates Manual, the Council of the Medical Association of Georgia has reviewed the Georgia Hospital-Medical Mediation Council proposal, at which time there was opposition to the number of medical specialists on the proposed council. Therefore, it was voted to disapprove the proposal as such due to the above-mentioned reason. Council recommended that the proposed Mediation Council choose a tenth member from the field of radiology, pathology, or anesthesiology, and with this change they approve the proposal.

The Hospital Relations Committee understands that the non-professional group—that is, the Georgia Hospital Association—feels that the membership of this Council is getting excessive members from the medical profession and will not accept this proposal with such a membership. Therefore, the Hospital Relations Committee at its meeting on April 13 recommended that the membership of the Hospital-Medical Mediation Council should consist of four members from the Medical Association of Georgia, two members from the Georgia Association of Hospital Governing Boards, and two members from the Georgia Hospital Association. The Department of Public Health (State Board of Health) will designate one member as an ex-officio non-voting member to attend all meetings in an advisory capacity. (MAG members to be selected by the full Council of the MAG.)

It was further recommended that the plan as previously presented with the above change in membership should be accepted except that the word “small” should be deleted.

The Hospital Relations Committee further recommends that the House of Delegates of the Medical Association of Georgia approve the “Hospital Care for the

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Indigent" program. Attached is information concerning the program.

There have been numerous requests from physicians throughout the state for action concerning adequate legislation being secured requiring one year of satisfactory internship in an approved hospital before licensure to practice medicine in the state of Georgia. Following successful completion of the examination as given by the State Board of Medical Examiners, the applicant should be required to present evidence of satisfactory completion of said internship before being issued a license.

An amendment of this nature to the Medical Practice Act of the State of Georgia is long overdue. Georgia is one of the few states not requiring such training. It is generally agreed among medical educators that the internship is one of the most valuable years spent in the training of physicians. As members of the Medical Association, we are charged with the responsibility of our fellow practitioners and, in turn, for their responsibility to the public.

In addition to elevating the standards of practice, such an amendment would promote a healthier relationship between interns and the hospital in which they work.

It is requested that the above be reviewed and studied by the House of Delegates and that the Legislative Committee secure effective legislation for such.

"HOSPITAL CARE FOR THE INDIGENT" PROGRAM

Act No. 397, Georgia Laws 1957, contains legislative authority for the creation of a "Hospital Care for the Indigent" program. The purpose of the program is to "assist counties in the purchase of hospital care for persons who are ill or injured, and who can be helped by treatment in a hospital, and who are financially unable to meet the full cost of hospital care from their own resources or from the resources of those upon whom they are legally dependent."

The program is a state-county jointly financed and administered approach to providing hospital care for the medically indigent. Participation in the program is voluntary with each county and local program administration will be encouraged. One of the basic program objectives is to provide financial means for the payment of hospital care for indigent patients who are hospitalized outside their respective county of residency.

Practicing physicians and medical societies will have basic roles in the program in the following ways:

- (1) Each county program must have the endorsement of the local medical society.
- (2) Each county plan must contain a resolution of acceptance from the medical staff of participating hospitals.
- (3) All applications for care under the program must be initiated by a physician.

The medical profession has representation on the Hospital Care Council and the State Board of Health. Furthermore, the Program will be planned and administered in close liaison with the Medical Association of Georgia.

Although there will be some broad statewide requirements, the program will be predominantly local in nature and administration. A key element in the program administration framework will be a county program plan. Such plan will be prepared annually at

the local level and submitted to the state for approval. This procedure will permit each county to pattern the program to its need. Within minimal state requirements, each county will determine its criteria pertaining to the financial eligibility of patients and the need for hospitalization. The certification of individual patients for care under the program shall be entirely a local matter.

The General Assembly delegated the administration of the program to the State Board of Health. The act authorizes the State Board of Health, after consultation with the Hospital Care Council, to adopt and promulgate such rules and regulations as may be necessary for the proper administration of the program. On January 29, 1958, the Hospital Care Council endorsed the proposed Rules and Regulations and recommended approval by the State Board of Health. On April 10, 1958, the State Board of Health approved the rules and regulations governing the program and directed that such rules and regulations be submitted to the House of Delegates of the Medical Association of Georgia for their review.

The House of Delegates of the Medical Association of Georgia is requested to endorse the development of the "Hospital Care for the Indigent" program and the principles indicated in the rules and regulations approved by the State Board of Health on April 10, 1958.

REFERENCE COMMITTEE RECOMMENDATION—The report of the Hospital Relations Committee and the supplementary report of the Hospital Relations Committee No. E were considered at the same time. We recommend to the House of Delegates that the Legislative Committee set up plans to require one year of satisfactory internship in an approved hospital for Georgia license. We also recommend that the House of Delegates endorse the development of the Hospital Care for Indigent Program and the plans indicated and the rules and regulations approved by the State Board of Health on April 10, 1958.

Reference Committee No. 4 also recommends for House of Delegates approval that the plans presented in the supplementary report No. E regarding the membership of the Hospital Mediation Council should be approved. The Committee will consist of four physicians appointed by Council, two members from the Georgia Association of Hospital Governing Boards and two members from the Georgia Hospital Association, and one ex-officio member from the State Department of Public Health.

HOUSE OF DELEGATES ACTION—On motion (Thomas, Richmond-Hatcher, Bibb) it was moved that the make-up of the Hospital Mediation Council Committee be left to the discretion of Council and that the Reference Committee recommendation be so amended as to omit the following: "The Committee will consist of four physicians appointed by Council. Two members from the Georgia Association of Hospital Governing Boards and two members from the Georgia Hospital Association and one ex-officio member from the State Department of Public Health." This motion was then approved. The House then adopted the report of the Hospital Relations Committee and the Supplementary Report of the Hospital Relations Committee No. E as amended by the House on motion duly made and seconded.

Industrial Health Committee

ROBERT HARBIN, M.D., Rome, *Chairman*

The Industrial Health Committee met on several occasions to consider problems referred to the committee. Our Committee recommended to the Council that certain equitable changes should be considered in the state of Georgia Workmen's Compensation Act Fee Schedule and submitted these changes to the Council of the Medical Association of Georgia with the recommendation that these changes be submitted by the Council, after Council approval, to the appropriate authority of the Georgia State Board of Workmen's

Compensation. These revisions in the present Workmen's Compensation Act Fee Schedule were subsequently approved by the Council, and the Council submitted them to the Georgia State Board of Workmen's Compensation.

Our Committee also made a recommendation about the selection of physicians by the patient under the present Workmen's Compensation laws as follows: "That the Council of the Medical Association of Georgia recognize that this problem exists and take steps to preserve the patient-physician relationship." The Council approved this recommendation, and on motion of the Council, our Industrial Health Committee was requested to petition the Georgia Board of Workmen's Compensation to have each employer list several doctors of medicine who are acceptable to them and to disseminate this information to the employee so that the employees would have some choice of physician in each community if the patient so requests in lieu of the present system which may deny free choice of physician to the patient. Our Committee so petitioned the Georgia State Board of Workmen's Compensation.

At a later date the Council of the Medical Association of Georgia requested our committee to meet with certain members of industry in Georgia and a member of the Georgia State Workmen's Compensation Board to further discuss the proposed revision in the present schedule of fees of the Georgia Workmen's Compensation Act Fee Schedule. This meeting was convened and a most cordial discussion of the problems ensued.

At the present time the Georgia State Board of Workmen's Compensation has not informed the Council as to their action on the above recommendations, and it is our hope that our Committee has fulfilled its purpose in meeting on these problems and making the recommendations to Council and petitioning the State Board of Workmen's Compensation on these matters.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends that the House of Delegates approve the report of the Industrial Health Committee.

HOUSE OF DELEGATES ACTION—Adopted the Industrial Health Committee report as recommended by the Reference Committee on motion duly made and seconded.

Crawford W. Long Committee

LESTER RUMBLE, JR., M.D., Atlanta, *Chairman*

It is with pleasure that the Crawford W. Long Memorial Committee reports the completion of the Crawford W. Long Memorial in Jefferson, Georgia. Most of the members have probably been able to follow the progress of this museum in the *Journal* from time to time.

The museum is open each day of the week from 9:00 A.M. to 5:30 P.M., on Saturdays from 9:00 to 5:00 and on Sundays from 1:00 to 5:00. This museum has been visited by individuals from 15 foreign countries and from 41 of the 48 states. It has had a visitation so far of over 5,000 individuals since it opened.

Plans are in progress now to enlarge this museum into a full scale museum to pain, the first of it's kind in the world. It is hoped by the time report period comes next year that part of this will have been accomplished.

Let me urge you to take the opportunity to come by the exhibit describing this museum, or preferably that

you make a trip to Jefferson to see what has been accomplished in memorializing the event of the discovery of ether anesthesia.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends approval of the report of the Crawford W. Long Memorial Committee and commends the Committee for its efforts in this very worthwhile project.

HOUSE OF DELEGATES ACTION—Adopted the Crawford W. Long Committee report as recommended by the Reference Committee on motion duly made and seconded.

Supplementary Report of Crawford W. Long Committee No. I

MUSEUM MAINTENANCE

LESTER RUMBLE, JR., M.D., Atlanta

WHEREAS, the Medical Association of Georgia originally agreed to underwrite the maintenance of the Crawford Long Museum, and

WHEREAS, recent attempts to obtain outside help in this maintenance have not been entirely successful, and

WHEREAS, Council has recommended that efforts be made to obtain such outside help, and this is in the process of being done, and

WHEREAS, funds on hand are sufficient to keep the museum open through the month of May,

NOW THEREFORE BE IT RESOLVED that the MAG allot sufficient funds to maintain the museum through the month of September at which time other funds should be available.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends that the House of Delegates approve the supplementary report of the Crawford W. Long Committee No. 1: Museum Maintenance.

HOUSE OF DELEGATES ACTION—Adopted the supplementary report of the Crawford W. Long Committee No. 1: Museum Maintenance as recommended by the Reference Committee on motion duly made and seconded.

Public Service

JOHN P. HEARD, M.D., Decatur, *Chairman*

This committee has met three times during the year and has accomplished the following:

(1) In conjunction with the Rural Health Committee, instigated the publishing of a medical column in the weekly newspapers of the state. This work has now been turned over to a Health Column Committee and the column is expected to be published sometime in the spring of 1958. In addition to writing about medical diseases, we feel that this column can be used to inform the public of the interest of the medical profession in emergency call systems, public health, grievance committees, and civic and community projects.

(2) Published an indoctrination booklet for new members of the MAG, and sent a copy of this booklet to all present members.

(3) Began to lay plans for a highway safety campaign in conjunction with the AMA Highway Safety Campaign during the year 1958.

(4) Sent the chairman of the Public Relations Committee to the AMA PR Conference in Chicago, August, 1957.

(5) The committee is in the process now of forming a film library and possibly a speakers bureau, which could be used by both the medical profession and lay

organizations When this is formed, it will be advertised in our weekly health column.

(6) Purchased a film of the TV program, "The Road Back," the story of our state mental hospital at Milledgeville, for showing throughout the state.

(7) Cooperated with the Bibb County Medical Society in plans for annual session.

In addition the following projects are under consideration:

(1) Plans are being formulated for a 16 page magazine supplement to the state's Sunday newspapers. This will advertise the high status of medicine in Georgia, explaining to the public the purpose of the MAG.

(2) The committee is considering a portable fair booth, which can be carried throughout the state for county fairs and other meetings.

(3) We are organizing a program of education for the public through our weekly health column to explain the educational requirements for the various medical cultists, as compared with the modern day doctor of medicine.

(4) We plan to publish booklets of instructions for county society officers, delegates, and committee chairmen.

(5) The possibility of a state PR meeting to indoctrinate PR chairmen throughout the state during 1959 is being considered.

One great field that this committee has not been able to approach, was that of Medical Education Week, which occurs in the spring each year. It is sponsored by AMA and a wealth of information is sent out from AMA headquarters about how a program to emphasize medical education should be carried on. This is a tremendous task and has to be carried to each local community, including the radio stations and newspapers. Even though this is a tremendous task, it is an all important one, and it is recommended that a special committee be appointed to handle medical education week each year so that an effective program could be carried out.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends that the House of Delegates approve the report of the Committee on Public Service and also recommends that a special committee be appointed to handle Medical Education Week.

HOUSE OF DELEGATES ACTION—Adopted the report of the Committee on Public Service as recommended by the Reference Committee with the additional recommendation of the Reference Committee on the appointment of a special committee to handle Medical Education Week on motion duly made and seconded.

Rural Health

J. LEE WALKER, M.D., *Clarkesville, Chairman*

The first full meeting of the Rural Health Committee was held on September 22, 1957, at the Academy of Medicine in Atlanta, Georgia. Also at this meeting were the members of the Advisory Committee. All the projects of the Committee were discussed and one new project was proposed by the Advisory Committee and there was a discussion regarding the holding of a Junior Day in cooperation with the Georgia Academy of General Practice. The following projects were adopted earlier in the year for work by the committee:

1. The establishment and operation of an Advisory Committee to the Rural Health Committee.
2. The recruitment of paramedical personnel.

3. Operating of Junior-Senior Days at both medical colleges.

4. Emphasis to rural people of the importance of having a family physician.

5. A project to encourage the presenting of lectures at both medical schools in an effort to help recruit family doctors.

6. The operation of a physician placement service for the state of Georgia.

7. The establishment of a perceptorship program for both medical colleges.

8. A weekly news health column.

9. The development of a check list pamphlet on health insurance to be distributed through the Advisory Committee to help rural people in knowing how to purchase good health insurance.

10. The publication of a pamphlet on economic poisons in general use throughout Georgia.

11. The distribution of health record cards and family health records.

12. The use of the American Medical Association Film library for our extension service.

13. The development of a program of having a chaplain in every hospital in the state of Georgia.

14. Publication of a pamphlet for helping to recruit paramedical personnel.

The following is a report on each of these projects.

ADVISORY COMMITTEE

This Committee was established and has been very helpful in both the planning and carrying out of projects of the Committee. On this Advisory Committee at the present time are representatives from the 4H Clubs of Georgia who represent 141,000 members in the state, representatives from the Home Demonstration Clubs throughout the state which represents 10,000 women; representatives of the county agents which comprises all of the counties in the state; one representative from the Farm Bureau which represents 40,000 people throughout the state of Georgia; a member from the Georgia Council of Churches which represents all of the Protestant Churches throughout the state and a representative from the Extension Service, the Health Education Specialist. All of these members attended Committee meetings and were active in discussing projects that were already being worked on and proposing new projects. At the request of the Health Education Specialist a letter giving information regarding polio vaccine was prepared and distributed. This was published throughout the state over 99 radio stations, through all county and home demonstration agents, and three programs in Athens and Atlanta on statewide radio hookup. They have distributed up to the present, through home demonstration clubs, approximately 15,000 of the personal health record cards for carrying in one's wallet and approximately 7,500 of the family health records which are published by the American Medical Association. Members of this Committee met in Athens with Mr. Aubrey Gates the Director of the AMA Council on Rural Health and helped him in planning the program for the National Rural Health Conference held in Jackson, Mississippi in March, 1958.

PARAMEDICAL PERSONNEL

Through the efforts of the committee a new school of practical nursing has been established at the North Georgia Trade and Vocational School in Clarkesville

and the first class of pupils has been recently graduated from this school. They are making excellent progress and the second class is now in session. Also, to begin July 1, is a school for the training of laboratory assistants. This will be conducted through the Department of Vocational Education at the North Georgia Trade School in Clarkesville. Mr. Marvin Patterson from Gainesville, Georgia has been employed to be the director of this school. The general nature of the school will be that it will be a twelve months course. The first six months will be conducted on the campus of the trade school and will comprise largely lectures and didactic work. There will be sufficient practical work available on the 700 other students for familiarizing them with technical procedures. During this initial period there will be ten hours of lectures given on the basic techniques of X-Ray to enable these students to be able more easily to learn X-Ray in the hospital and doctors offices and other places where they may work. Also the students will be familiarized with the use of diathermy machines and electrocardiograph machines. During the second six months these students will be assigned to various hospitals throughout the area where they will engage in practical work. This will be under the supervision of the technologists and other personnel in these hospitals; however, it is planned to have a second person connected with the school to visit each of the students at least once a week to make progress reports, and if it is found necessary, students can be brought back in for a short period of time for intensified short courses and lectures if this is deemed necessary. At the end of twelve months those students who have satisfactorily completed both courses will be given a certificate from the trade school which will show what subjects they have covered and what specific procedures they are qualified to do. It is not anticipated that these students will replace in any way the medical technologist but that they will supply help to them and in the smaller areas where less complicated procedures are done they can fill in and will also be available to work in doctors' offices. A copy of the minutes of the first meeting of the Advisory Committee to this school is attached to this report. It is urgently requested that all publicity possible be given to this project and that all doctors assist in recruiting personnel for this school.

There has been considerable opposition from the Society of Technologists and also from a few of the pathologists in the state. However, it is felt that the project for training these laboratory aids will prove itself and it is hoped that strong endorsement of the House of Delegates will be given to this program to assist us in carrying it forward. I am sure all of you physicians who are practicing out in rural communities realize the urgent need for training personnel of this nature.

It has also been brought to our attention that not enough students are applying for the practical nursing courses which are available. Most of these courses are available without tuition charges since these are state schools and the students can live very cheaply in the dormitories at the school. There is also a school in South Georgia at Americus that conducts a practical nursing course.

The booklet which we will publish to help in recruiting personnel or all paramedical and closely related

fields is in rough form. We are having considerable difficulty in locating the money to publish such a project. It is felt that this booklet must be attractive in order to do a good job and will cost several thousand dollars to publish. We are presently looking around for some kind of sponsor who may help us to publish this worthwhile book.

It was decided that the course of lectures which are being conducted at each medical school should be enlarged from what the committee originally had in mind and consequently a special committee of council was organized for this purpose. The Chairman of the rural health committee served on this special committee. The courses were prepared and have already been conducted with great success at both medical schools and a complete report is being submitted by this particular committee. The seniors will be entertained at the end of this course with a special Senior Day by the Academy of General Practice and in addition to this there will be a Junior Day held at each medical school to be jointly conducted by the Rural Health Committee and the Georgia Academy of General Practice. Both the programs that were held last year at the schools were very successful and this is considered a most worthwhile project and should be continued by this group. Along this same line it was found that the Georgia Academy of General Practice was already working toward the establishment of a preceptorship program at both schools so this project was dropped from the active list of the rural health committee; however, our help was offered to the Academy in any way they deemed necessary to help carry out the project.

The Physician Placement Service has been operating very nicely and as time goes on is doing a better and better job. It is under the direction of Mr. John Kiser, one of our executive secretaries in the Atlanta office. We have also had the help and cooperation of all members of the committee in carrying out this project.

The way this program works technically is if a doctor wishes to be placed in Georgia, he fills out a form which we supply to him which gives all the basic information necessary including the type training he has had, his age, his family, religious statistics and preferences that he may have as to the particular area or size of community in which he wishes to practice. Periodically this list is revised and is distributed to various communities and other physicians who are seeking men to come to their communities. Also we publish a separate list of communities that are seeking physicians, giving basic information on these communities and this information is given to all doctors who are looking for areas in Georgia to practice. It is felt that as time goes on that this project will be even more worthwhile than it is at present. We have had conversations with the medical school scholarship committee and hope that we can work with them in helping to place students in more needed areas when they come out from this scholarship program rather than in some area that is already fairly well supplied with doctors.

The Health News Weekly Column has gotten under way during this month and a copy of it is available for you to see what is being done along this line. Dr. Howard Derrick, a member of the rural health committee is the chairman of the weekly health column

committee and has been doing an excellent job in organizing this project. A special committee composed of Dr. Derrick and the chairman of the rural health committee; a psychiatrist, Dr. Yochem; surgeon, Dr. Glass; internist, Dr. Wyatt; pediatrician, Dr. Tom McPherson; obstetrician, Dr. Jule Neal, comprise the committee that has been working on this project. The general way that they work is that they sit down together and discuss various topics and the writer Miss Edwina Davis takes notes on the topics and then writes an article and at the next meeting of the committee the articles that she has written are gone over and corrected to be sure that they are medically correct and then the final article is ready for publication.

The pamphlet about information of health insurance and check list for the same is ready for publication at the time of writing this report and it is hoped that by the time of the meeting with the House of Delegates this will have been published and if so a copy of it will be available for your inspection. This is to be distributed through our home demonstration and county agents and it is expected that 40 or 50 thousand copies of it will be distributed throughout the state of Georgia.

The State Health Department is opening shortly a program of poison centers and perhaps by the time this is read they will have already opened several centers throughout the state, and in connection with this we are publishing a joint pamphlet on economic poisons. This pamphlet includes excerpts from a much longer publication which most doctors in the state of Georgia have received one or two copies of. It was felt by the committee that most of these went into the waste basket so an effort was made to pick out the pertinent points in this subject and it will be distributed to all physicians in Georgia and will contain information as to where and how the poison centers operate and how the physicians may use them in helping to determine how to treat patients and how to diagnose them also. It is planned that the information in this pamphlet will later be published in the *Medical Association Journal* to give further emphasis to this project.

Due to technical difficulties in the AMA film library it has been impossible to work out a satisfactory program on films. The extension services wished to get films for a period of six months showing; however, so far AMA has refused to release the films for more than one showing and this is not very practical at the present time.

I have not had a recent report from the chaplains program which is supposed to be under the sponsorship of the Georgia Council of Churches. Perhaps by the time of the meeting we will have a further report on this project.

We have been asked by the Advisory Council to prepare a suggested health certificate form for campers who are going to 4H camps during the summer and these standard forms will be prepared and distributed through the 4H clubs. These forms will be brought to doctors over the state and they will be asked to fill them out before the campers go to the summer camp.

The second study conference for rural health committee chairmen was held at Purdue University in October. The chairman of the committee attended and many worthwhile suggestions and help were heard at

this program. This chairman also attended the National Rural Health Conference, which was held in Jackson, Mississippi on March 6, 7, and 8 and participated in a panel of this program discussing what the patient thinks about the doctor and what the doctor thinks about the patient. The entire rural health conference was very informative and it is most unfortunate that no doctors from the state of Georgia attended other than the chairman of the committee, particularly since this program was so close by. It is felt that many physicians should have attended. The conference next year will be in Wichita, Kansas and I hope that some doctors will plan to attend this meeting. It will be well worth your time to see what other leaders in rural organizations are doing to try to better help throughout rural America.

As time goes on it becomes more and more apparent to the chairman of the rural health committee that not only the setup of this committee but all committees in our state association need revamping. There is no real provision for continuation. I feel that the reason many, not only chairmen but other committee members, do not perform or do much work is that they are afraid that if they do a good job they will have a permanent job for the rest of their lives. It looks like this is true, so I wish to strongly recommend to the House of Delegates that:

(1) The incoming President and Council be specifically instructed to make committee appointments on a staggered basis so that there will be regular rotation with new members coming on each year and old members going off with always a majority of old members present knowing what is going on and also that a vice-chairman should be appointed who will take over the duties as chairman when the chairman's term has expired. This particular setup has been used very successfully by the National American Academy of General Practice and its committees, and I feel would be helpful in making the committee setup for the Medical Association of Georgia a better and more active one with more real work done by the committees. If a man can see ahead that after a period of three years that he can probably be relieved of the burden of the work he is more apt to be able to put more into it, at least that is my feeling and the way that I see it. I don't think that this can be too strongly recommended. Council has been very generous in granting our requests for expenditures this year and it is realized that we have requested more than has ever been requested before; however, it is my feeling, that the projects we are conducting are all worthwhile and the favorable publicity as well as the good that is done by them will more than repay the small amount of money that we put out on these projects.

(2) It is recommended strongly by this committee that next year at least one of our executive secretaries be sent to the National Rural Health Conference in Kansas and if another conference is held for committee chairmen, at the national level next year, also at this meeting one of our executive secretaries should attend.

(3) It is hoped that the incompleting projects above will be carried out the remainder of this year.

(4) A special endorsement of the lab school and practical nursing school programs is requested.

Supplementary Report for Rural Health Committee No. D

RURAL HEALTH

J. LEE WALKER, M.D., Clarkesville

Pre-camp physical examinations for 4-H Club members. The Committee would like to recommend that the House of Delegates go on record suggesting to all doctors in the State that whenever a 4-H member presents one of these forms they be done without charge.

The book to help in recruitment of para-medical personnel is in the hands of printers. A sample of such a book along with proposed format is shown in the Committee display.

Insurance pamphlet is now in the hands of the designers; a copy of the material is also on display.

Weekly Health News Column. This project is already a big success, and I would like to recommend that this committee become a Special Committee of MAG rather than a Subcommittee of Rural Health and Public Relations. I hope delegates will give a special commendation to each member of this Committee to be transmitted in written form.

At the present time these columns are being distributed to over 200 weekly newspapers by this Committee. This Committee meets every two weeks and has a backlog of 30 articles ready for publication. As this Committee initiated this project and has the full cooperation of the press, it is recommended the present committee men be continued.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends that the House of Delegates approve the suggestions of the Rural Health Committee regarding Committee appointments being made on a staggered basis and the other recommendations made by the Committee regarding Committee structure. It is also recommended that the MAG at the discretion of Council have representation at the National Rural Health Council meeting.

Reference Committee No. 4 recommends that the Laboratory School and Practical Nursing School in Clarkesville be endorsed for a period of one year and recommends that the Council appoint a Committee for continuing study and evaluation of the school.

HOUSE OF DELEGATES ACTION—Adopted the report of the Rural Health Committee and the supplementary report of the Rural Health Committee No. D: Rural Health as recommended by the Reference Committee with the additional Reference Committee recommendation concerning the Laboratory School and Practical Nursing School at Clarkesville on motion duly made and seconded.

American Medical Education Foundation

GEORGE T. NICHOLSON, M.D., Cornelia, *Chairman*

The American Medical Education Committee was rather inactive during the first half of our year. However, due to the ever increasing threat of socialized medicine, it became more apparent that this Committee is not only an essential committee to the Medical Association of Georgia, but is absolutely vital. We appreciate the response that the doctors in Georgia have shown almost voluntarily, but donations from Georgia physicians have been so pitifully small in comparison to what we have received from the American Medical Education Foundation.

Our total contributions for the state of Georgia to the American Medical Education Foundation during 1957 from January 1st through December 31st amounted to only \$3,586.12. This is a very small increase over 1956 during which time the doctors of Georgia donated to the AMEF \$3,331.00. We might call attention to

the fact that of this \$3,586.12 contributed during the year 1957 the Woman's Auxiliary to the Medical Association of Georgia contributed \$1,418.12 of the total amount from Georgia.

We would next like to call your attention to the vital importance of making donations to the AMEF. We have received during various years such amounts as \$55,850.52 which was in 1955. During 1956 we received from the AMEF National Fund \$72,640.00. As you can see, we have done very little as physicians toward donating even a minor part of the money which our medical schools have received.

At this time, we of the Committee, would like to call your attention again to the fact that the Woman's Auxiliary has been most active throughout the entire United States as well as showing an interest in the AMEF in the State of Georgia. Mrs. Paul Craig, President of the Woman's Auxiliary to the American Medical Association, flatly puts it to the doctors of America as to whether or not the Auxiliary on the national level and the auxiliaries of the states should continue to try to work with the doctors or if the Auxiliary should take over the AMEF as a project of their own. Without the work of these faithful women, our showings as far as donations are concerned from the state of Georgia would be even pitifully smaller. Mrs. Craig suggests that memorial gifts could be made in honor of doctors who have passed away or members of a doctor's family. Suitable memorial cards are mailed from the national headquarters in Chicago.

The chairman of your AMEF Committee attended the meeting of the State Chairmen at the Drake Hotel in Chicago on January 26th and 27th. The meeting was most enlightening, as well as very embarrassing to your Chairman in view of the small contribution from the state. I would like at this time to point out that our sister state of South Carolina, in 1956 donated \$8,667.72 and during 1957 donated \$14,266.91 to the National Fund. I do not see how we can do less.

We, of the Committee, strongly recommend to the House of Delegates in their deliberation that we have one of two courses to take. Either, first, adopt as a policy in the Medical Association of Georgia that each county society and each district society appropriate part of their funds received from dues to the society as a contribution to the AMEF, or (2) make a portion of our dues to the State organization as a contribution to the American Medical Education Foundation and in view of the increased dues made by the House of Delegates in 1957, at least \$5.00 of those dues should be allocated to the American Medical Education Foundation. This policy has been followed in other states very successfully, and is the reason that South Carolina was able to donate over \$14,000.00.

We earnestly solicit your support in either or both of these programs and recommend that each physician of the state of Georgia make some kind of donation, whether large or small, to the AMEF at once.

While in convention there is a booth for the American Medical Education Foundation which depicts the vital need for the support of the physicians of Georgia.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 accepts the report but disapproves compulsory contributions by membership of MAG. It is our recommendation that each county medical society be asked to voluntarily contribute \$5.00 per each active dues paying member and that the Executive

Secretary of the MAG notify each county society secretary of this responsibility and that money so collected be contributed to the AMEF through the MAG.

HOUSE OF DELEGATES ACTION—Adopted the Report of the Committee on AMEF with the Reference Committee amendment concerning voluntary contributions as recommended by the Reference Committee on motion duly made and seconded.

Radiologic Safety

ROBERT M. TANKESLEY, M.D., Atlanta, *Chairman*

The Special Committee on Radiologic Safety was formed in January 1958. This committee composed of six radiologists, serves as Liaison Committee to the state of Georgia, Department of Public Health and will aid and advise in formulating policies on radiologic safety. This Committee was formed by the action of Council and President Schaefer, at the request of the Georgia Radiological Society. Awareness of increasing radiation to the population, revised safety limits in radiation exposure, and necessity for evaluating and minimizing this radiation prompted the Georgia Radiological Society to offer its assistance in advising safety in the use of ionizing radiation in medicine. The members of this new committee and related groups have been notified of the formation of this committee and its availability. As yet it has not been called upon to function, but activity is expected in 1958.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 4 recommends that the House of Delegates approve the report of the Special Committee on Radiologic Safety.

HOUSE OF DELEGATES ACTION—Adopted the report of the Special Committee on Radiologic Safety as recommended by the Reference Committee on motion duly made and seconded.

The American Registry of Doctor's Nurses

SUMTER COUNTY MEDICAL SOCIETY

WHEREAS, the American Registry of Doctor's Nurses is a newly formed association limiting membership only to doctor's office nurses, and

WHEREAS, it is believed this association will offer not only recognition for doctor's nurses, but benefits as well, and

WHEREAS, the constitution, by-laws, and preamble are complete and in accord with medical ethics, and

WHEREAS, it is believed that ethics of doctor's nurses will be then improved

BE IT RESOLVED that the Sumter County Medical Society endorse the American Registry of Doctor's Nurses, and

BE IT RESOLVED that the Sumter County Medical Society recommend that the American Registry of Doctor's Nurses be approved by the Medical Association of Georgia

BE IT FURTHER RESOLVED that the resolution be sent to the Executive Secretary of the Medical Association of Georgia for action of the House of Delegates at its next session.

PREAMBLE

The American Registry of Doctor's Nurses or the American Association of Doctor's Nurses is a private, fraternal association for office nurses of a specialized career. Although this association may be a duplication of some other types, it is primarily different in these respects: It names the nurse as a nurse and not as an

assistant; a doctor's nurse (as she most certainly is) and not as a medical assistant (which could very well refer to a medical doctor).

The American Registry of Doctor's Nurses already has a broad acceptance by doctors in Georgia and the southeastern states; those that have signed applications and those that have written congratulatory letters. The Registry has been in operation only three months and therefore its membership enrollment is just beginning to take form. About eighty doctors in Georgia thus far have signed applications for their nurses. Possible, potential enrollment is 255,000 (figured on the basis of an average of one and one-half nurses per doctor that maintains an office—170,000). Of the initial 5,000 applications or brochures sent to doctors, in care of their nurses, to Florida, Georgia, and Alabama to date three per cent have returned. However, they continue to come in each day which demonstrates the great need for the Association.

Since the Registry has just begun its activities, time has not allowed for maturity of the foundation of its Board of Directors which has at present, only three officers: Ralph Z. Bell, President; Robert Bickford, treasurer; and Evelyn Bickford, secretary. The president is a surgical supply salesman of ten years experience who has a wide and varied knowledge of nurses and their problems and has the personal support and recommendation of the Advisory Board. The treasurer is a businessman and owner of the Marianna Printing Company. He has had training in law and is a graduate of the Georgia Military Academy, a member of Lions International, and Sigma Delta Kappa. The secretary is a very competent correspondent and recorder thoroughly capable of performing the duties of her office. As growth demands, additional members will be elected.

Originally the intention of the American Registry of Doctor's Nurses was to restrict its membership role exclusively to the great number of women who had made a career of nursing for a doctor but had no association. However, since the demand was so great by L.P.N.'s and some R.N.'s, it was decided (with the approval of the Advisory Board) that no restrictions be made as to classification of nurses.

FEES

At the present the application fee is \$2.00 and annual membership dues only \$10.00. No subscription fee to newsletters, bulletin, or magazine required for members. Newsletter and bulletins sent only to members. Anyone may subscribe to the magazine.

It is noteworthy to state that a large number of doctors are paying these fees.

PRESUMPTIONS

Since it is impossible to contact and investigate thoroughly each prospective member and applicant, it is presumed by the Registry that the individual doctor inspects each application thoroughly before signing: That he, therefore, recommends an intelligent, qualified, neat, and morally clean individual.

RELATIONSHIP OF THE REGISTRY AND ADVISORY BOARD

The function of the Advisory Board is extremely important and vitally necessary to the success and

maintenance of the program. It gives maturity, knowledge, and depth with such magnitude that the program has a functional, strong foundation and direction to assure and insure ethics, standards, and qualifications.

CONCLUSIONS

The American Registry of Doctor's Nurses has not requested formal approval or acceptance from any medical association. Since eight of the members of the Advisory Board are Georgia residents and six of the medical doctors are members of the Medical Association of Georgia, it is logical that your approval be sought first before presentation to other medical associations. With the approval and recommendation of the Medical Association of Georgia, the Registry would like to petition the American Medical Association for similar consideration and action.

The majority of the Advisory Board members desire that the Registry move to Georgia. This is being seriously considered since enrollment thus far has been greater and therefore with broader acceptance in Georgia.

LIST OF ADVISORY BOARD

D. L. Burns, M.D. 313 E. Adair Street Valdosta, Georgia	Rev. Philip W. Dunford 1400 Eighth Avenue Albany, Georgia
Albert S. Trulock, Jr., M.D. F.A.C.S., D.A.B. 1009 N. Monroe Street Albany, Georgia	S. H. Story, Jr., M.D. Doctor's Building Valdosta, Georgia
Frank A. Wilson, M.D. Leslie, Georgia	W. L. Hunter, M.D. Monticello, Georgia
Thomas H. Moseley, M.D. Doctor's Building Valdosta, Georgia	L. W. Willis, M.D. Bainbridge, Georgia
James E. Thompson, M.D. Chattahoochee, Florida	Julian B. Neel, M.D., F.A.C.S. Thomasville, Georgia
Bobbie O. Thompson, R.N., R.D.N. 8227 Stroelitz New Orleans, Louisiana	Mrs. Ada Davies, R.D.N. 1606 East Martin Mobile, Alabama
Lanette Carlton, R.N., R.D.N. Chattahoochee, Florida	Mrs. Angle Dunn, R.D.N. Leary, Georgia

REFERENCE COMMITTEE RECOMMENDATION—Resolution No. 3: The American Registry of Doctor's Nurses was studied and Reference Committee No. 4 recommends that the House of Delegates not endorse the American Registry of Doctor's Nurses as it is not customary for the MAG to officially endorse paramedical organizations.

HOUSE OF DELEGATES ACTION—Adopted the Recommendation of the Reference Committee on the Resolution No. 3: The American Registry of Doctor's Nurses on motion duly made and seconded.

It was moved by Chairman of Reference Committee No. 4, W. L. Pomeroy, Waycross, and duly seconded that the report of Reference Committee No. 4 be accepted as amended as a whole, and it was so ordered.

Report of Reference Committee No. 5

H. H. HAMMETT, JR., M.D., LAGRANGE, CHAIRMAN

(The following reports as presented to this reference committee are printed in full with the Reference Committee's recommendation and the action pursuant to it taken by the House of Delegates.)

Reference Committee No. 5 met at 2:30 p.m., April 28, 1958, in Room 934, Hotel Dempsey, Macon, Georgia. Members present were: H. Hilt Hammett, Jr., LaGrange, Chairman; C. Roy Williams, Wadley, Secretary; H. G. Davis, Jr., Sylvester; Allen A. Cole, Macon; Charles E. McArthur, Cordele; David Henry Poer, Atlanta; and L. C. Buchanan, Decatur.

Fourth District Councilor

J. W. CHAMBERS, M.D., LaGrange

As Councilor from the Fourth District I am happy to report that Medicine has made constant and definite progress during the year 1957. Our membership has remained fairly constant, our meetings have been reasonably attended and interesting, and our membership has exhibited interest in organized medicine throughout the year.

I am also happy to report that we have had no particular difficulties in the Fourth District during this year. There have been no marked medical legal problems, and no definite disciplinary problems have developed during this year. Our County Societies remain reasonably active. Some Societies, I believe, could be improved, but as a whole, the County Societies in our District are functioning well.

It is with some degree of personal regret that I submit this last report as Councilor from the Fourth District. I commend to the Council and to the House of Delegates and to the Membership of the Medical Association of Georgia the new Councilor and Vice-Councilor from the Fourth District, who, I am sure, will serve with even better effort than I have done. These years in which I have had the privilege of serving as Councilor have been enjoyable. I have not looked upon any of the duties as such and can truthfully say that they have all been a pleasure. I am sure that if my successor is awarded the same degree of cooperation that I have always received that the Medical Association of Georgia will continue to make progress throughout the year.

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Clayton-Fayette				
Wells Riley,				
Jonesboro . . .	4	4	4	4
Coweta				
George E. Mixon,				
Palmetto . . .	19	5	18	5
Lamar				
S. B. Traylor				
Barnesville . . .	4	4	4	4
Meriwether-Harris				
J. W. Smith,				
Manchester . . .	11	6	13	6

Newton				
J. W. Purcell, Jr.,				
Covington . . .	14	11	14	12
Spalding				
James Skinner,				
Griffin	39	33	35	29
Troup				
J. R. Turner,				
LaGrange	38	32	36	29
Upson				
Doug Head, Jr.,				
Thomaston . . .	16	11	16	13
	<hr/>	<hr/>	<hr/>	<hr/>
	145	106	140	102

Fourth District Vice-Councilor

VIRGIL B. WILLIAMS, M.D., Griffin

The Vice-Councilor of the Fourth District attended the meeting of Council in Valdosta on December 7-8, 1957. This is the only meeting which has taken place since the Vice-Councilor assumed office.

The Vice-Councilor has remained in readiness to perform any duties required of this office in the Fourth District.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 recommends acceptance for information of the report of the Fourth District Councilor and Vice-Councilor. This Reference Committee wishes to commend the retiring Councilor of the Fourth District, Dr. J. W. Chambers, LaGrange, for his untiring and unselfish efforts in behalf of the Fourth District and the Medical Association of Georgia.

HOUSE OF DELEGATES ACTION—Adopted the Report of the Fourth District Councilor and Vice-Councilor as recommended by the Reference Committee on motion duly made and seconded.

Fifth District Councilor

J. G. McDANIEL, M.D., Atlanta

Your Councilor has attended all the regular and called meetings of Council during the past year. In addition to this I have attended all except one of the monthly Executive Committee of Council meetings. I have attended meetings of both county medical society meetings within the district and the district meeting.

Your Councilor is Vice-Chairman of Council and Chairman of the MAG Finance Committee which has met on many occasions.

During 1957-58 we have been fortunate in having very few problems within the district. Everything at present is in good order.

The Vice-Councilor, Dr. Charles Jones, is a great comfort to MAG. He is extremely active on many committees and always comes up with a great job.

Fifth District Membership report follows:

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
DeKalb				
H. O. Carter,				
Decatur	72	67	59	58
Fulton				
Thos. J. Anderson, Jr.,				
Atlanta	861	704	836	680
	<hr/>	<hr/>	<hr/>	<hr/>
	933	771	895	738

REFERENCE COMMITTEE RECOMMENDATION—Report of the Fifth District Councilor is recommended for approval and we further

recommend that the Fifth District Medical Society have two meetings each year, if feasible and also recommend that the Executive Secretary transmit this request to the officers of the Fifth District Medical Society.

HOUSE OF DELEGATES ACTION—Adopted the report of the Fifth District Councilor as recommended by the Reference Committee with the additional Reference Committee recommendation concerning two annual meetings for the Fifth District Medical Society on motion duly made and seconded.

Sixth District Councilor

HENRY H. TIFT, M.D., Macon

The Sixth District Medical Society has had only one meeting since the last Annual Session of the Medical Association of Georgia. This meeting was held at the Macon Hospital in Macon, Georgia, December 4, 1957. Due to the generosity of one of Macon's business men, Mr. Michael J. Witman, we were able to have two excellent out-of-town speakers. Dr. Champ Lyons, of the University of Alabama School of Medicine, discussed the diagnosis and treatment of arteriosclerosis of the carotid arteries. Dr. Vernon Knight of Vanderbilt University, spoke on urinary tract infections. Local speakers were Dr. R. S. McMichael and Dr. Morris Brown. Following the meeting, a delightful social hour was held at the Idle Hour Country Club.

The spring meeting of the Sixth District Medical Society is scheduled for April 22nd in Dublin, Georgia.

The following medical societies are active in the Sixth District:

Counties and Secretaries	December, 1957		December, 1956	
	MAG	AMA	MAG	AMA
Baldwin				
John J. Word,				
Milledgeville . . .	29	13	26	13
Bibb				
Calder B. Clay,				
Macon	152	139	149	138
Jasper				
E. M. Lancaster,				
Shady Dale	4	3	3	3
Jefferson				
John J. Pilcher,				
Wrens	8	5	8	4
Laurens				
John A. Bell, Jr.,				
Dublin	25	10	29	12
Washington				
F. T. McElreath,				
Tennille	12	11	12	11
	<hr/>	<hr/>	<hr/>	<hr/>
	230	181	227	181

REFERENCE COMMITTEE RECOMMENDATION—We recommend that the report of the Sixth District Councilor be accepted with the following changes in the report of the Councilor: "That paragraph two should state that a meeting was held on April 22, 1958 at Dublin, Georgia."

HOUSE OF DELEGATES ACTION—Adopted the Sixth District Councilor Report as recommended and amended by the Reference Committee on motion duly made and seconded.

Cancer

HOKE WAMMOCK, M.D., Augusta, *Chairman*

The cancer program of the Medical Association of Georgia is showing continued progress in cancer control. This has been made possible by the continued cooperation and understanding of the various groups

concerned with the cancer problem. Through the efforts of the standing committee, working in cooperation with the Cancer Control Service of the Georgia Public Health Department and the Georgia Division of the American Cancer Society, this has been possible.

The committee has been concerned with the problem of available funds for cancer control, methods and means of cancer detection, and early diagnosis, service to the curable cancer patient and service to the incurable cancer patient, the improvement of the facilities for the care of the cancer patient, and educational features of the cancer program.

The available funds for cancer control from the Georgia Division of the Public Health Department are, of course, limited, and therefore, it is necessary that economy be practiced without sacrifice to the patient or jeopardy to the cancer control program. I am happy to state that the various cancer clinics in the state are cooperating in this respect.

The committee wishes to encourage all physicians to participate in the early detection of cancer by utilizing the cytological technique wherever possible in the early diagnosing of cancer. It, of course, goes without saying that early detection should result in the increased cure-rate, and likewise, will prove to be most economical in the long run.

The committee wishes to further encourage the various tumor clinics to maintain and develop their tumor registries. This is one of the ways and means of determining the effectiveness of the cancer control program and the results of treatment.

The committee further endorses the continued professional educational program of the Georgia Division of the American Cancer Society and that rendered by the Medical Schools of Georgia and the role of the Georgia Chapter of the College of Surgeons.

The committee further wishes to encourage all cancer clinics to continue to raise their standards of detection, diagnosis, and therapy of cancer by utilizing all facilities at our command today. The state of Georgia has a well rounded cancer control program and by the continued interest and support of all concerned, this program will become more effective and will result in the saving of many more lives.

The Chairman of the Standing Committee on Cancer wishes to express his deep appreciation to all members of the committee for their sympathetic understanding and genuine interest in the cancer control program of the Medical Association of Georgia.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 recommends acceptance of the report of the Committee on Cancer. We recommend that through the executive offices of the Medical Association of Georgia, the officers of the Georgia Division of the American Cancer Society be requested to establish a closer liaison with the Council of the Medical Association of Georgia as regards the professional, educational and teaching program.

HOUSE OF DELEGATES ACTION—Adopted the report of the Cancer Committee as recommended by the Reference Committee on motion duly made and seconded.

Geriatrics Committee

EDGAR WOODY, JR., M.D., Atlanta, *Chairman*

During the past twelve months the Committee on Geriatrics has been actively engaged in the investigation of ways and means whereby the problem of more

adequate facilities for the medical care of the aged in Georgia might be met. There is no doubt that the problem of inadequate nursing home facilities is recognized by all. The following plans are proposed by the Committee for consideration by the Medical Association of Georgia.

The situation could be effectively dealt with by the adoption of a set of standards by the Medical Association of Georgia for physical plant facilities and operating procedures to assure the highest possible standards of housekeeping, safety, and nursing service to all persons housed in voluntary and proprietary nursing homes, convalescent homes and institutions for the housing and medical care of the aged. Inspection of facilities could be carried out by a committee appointed by each county medical society and recommendations made for their improvement. If minimum requirements were not met within a reasonable period of time, then such a facility would be taken off an approved list and all practicing physicians within the area notified. Such a plan should force many so-called nursing homes to either raise their standards of patient care or be put out of business. Some statement of minimum standards must be outlined by the doctors before any concerted improvement in these facilities can be expected.

In addition to the above plan of action, it is believed that the committee on Geriatrics could sponsor and make available to the county medical societies an advisory and consultive service. This service could supply advice for the creation of facilities of the above types for communities whose older population groups do not need the full care afforded in the general hospital, yet cannot be adequately cared for in their own homes or in existing proprietary or voluntary institutions in the locality. This consultive service could be made available through the Geriatrics Committee to the local medical societies, church sponsors, or other community groups. A survey of community needs with recommendations of criteria to determine size and location of such installations could be made. Costs, operative procedures, and such other technical data and information which could guide and assist local groups to provide adequate physical facilities and the highest caliber of medical care could be supplied by this service. Information could be made available to local groups regarding costs of construction financed through private sources or community fund raising according to the demands and needs indicated locally.

This report gives a general idea of the type of planning in which your Geriatrics Committee has been engaged. With the problem of a large aged population already upon us, we must have a positive plan for meeting at least the medical aspects of the problem.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 recommends the acceptance of the report of the Committee on Geriatrics as written, with the addendum. (1) that Council of the Medical Association of Georgia actively and expeditiously adopt the set of standards as recommended in paragraph two of this report not to conflict with the existing regulations of the Public Health Department of the state of Georgia. Said standards as recommended by the Council of the Medical Association of Georgia be specifically concerned with medical and nursing care in such facilities; (2) and further, we recommend that the Legislative Committee of the Medical Association of Georgia consider the proper legislation to effectuate this legislation.

HOUSE OF DELEGATES ACTION—Adopted the Geriatrics Committee report as recommended by the Reference Committee and also adopted the addendum of the Reference Committee on motion duly made and seconded.

Insurance and Economics

DAVID R. THOMAS, JR. M.D., Augusta, *Chairman*

CHARLES S. JONES, M.D., Atlanta, *Co-Chairman*

The Insurance and Economic Committee has continued to function with the able assistance of Mr. Krueger, Mr. Kiser and their staff. The work of this committee has been more routine, and the frequent meetings demanding the time of the committee members have not been necessary. The big problem this year has been with the Georgia Plan, and an addendum report will be submitted following the meeting of the members of the Insurance and Economic Committee, the members of Council and, I hope, a representative from every County Medical Society with Insurance Commissioner, Mr. Zack Cravey.

Dr. John Elliott and Mr. H. B. Coolidge of Savannah have again handled the very necessary problem of the unlisted procedures and those unusual cases which continue to come to the attention of this committee.

Mr. Dick Jones of Greensboro, North Carolina has continued as Chairman of the Advisory Committee of Health and Insurance Council for the southeast. He has been most cooperative and renders a very valuable service to the doctors of our state. Mr. Lafayette Davis of Atlanta has been appointed as the member of this Council by the Insurance Industry for the state of Georgia.

PROFESSIONAL LIABILITY

The Professional Liability program being handled by the Saint Paul Mercury Indemnity Company has continued with favorable experience. This should again be reflected in further reduction of the premium that we will have to pay for this type of insurance coverage.

I must again call your attention to the fact that a continued favorable experience rests with the members of the Medical Association of Georgia.

The patient-physician relations in this section of the country is obviously much better than they are in the north, mid-west, and west. Here in the state of Georgia, the rural physician and those physicians practicing in the smaller cities seem to have an overall better relation with patients, as is reflected by the number of claims being made in larger cities. The instructions being given new members by the Fulton County Medical Society is to be commended to all County Societies.

GROUP LIFE INSURANCE

Our Group Life Insurance Program, which was put into effect in October 1954, reflects favorably for the doctors and the losses experienced by the insurance company; though continuing high, it is believed, will adjust itself within the next year or two. This simply means that the loss ratio experienced by the Provident Life and Accident Insurance Company is coming into a realistic figure and the company is anxious to enroll as many new members as possible for the protection of both the physicians of Georgia and the Insurance Company. The Executive Secretary is furnishing the insurance company the list of the new members promptly, and they are receiving the information in order that they may be covered within six months after becoming a member of the Medical Association of Georgia without having to show that they are insurable.

GROUP HEALTH AND ACCIDENT INSURANCE

Group Health and Accident Insurance has continued

in force and has been compared with other Group Health and Accident policies available. It is our opinion that the policy that we have in the overall is as good as can be purchased at this time.

CATASTROPHIC HOSPITAL AND NURSE INSURANCE

The Catastrophic Hospital and Nurse Insurance Program became effective in August of 1957, and to date seven physicians or members of their families have received the final payment of \$4,585.53. Four physicians or members of their families have obtained partial payment of \$4,385.68. One physician, whose partial payment has already totaled \$2500.00 because of what appears to be a very extended catastrophe, will doubtless receive the full \$10,000.00 before the case is closed.

We feel that this type of insurance means a great deal to the members of the Medical Association of Georgia who have purchased this coverage.

THE GEORGIA PLAN

The Georgia Plan Insurance Program that was initiated at a time when socialized medicine was being so strongly pushed has not been supported by the members of the Medical Association of Georgia as is necessary if it is to be an effective deterrent to the socialization of our profession.

The revised Georgia Plan has not been put into effect because it has been blocked by Insurance Commissioner, Mr. Zack Cravey, of the state of Georgia, making it impossible for the insurance companies to revise their policies to date. A meeting with the Insurance Commissioner, referred to in the beginning of this report, will be held and an addendum report submitted.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 accepts the report of the Committee on Insurance and Economics and commends the committee for the fine work that has been accomplished in this field. An oral addendum report by Insurance and Economics Committee Chairman David R. Thomas, Jr., of Augusta, was presented with reference to the present status of the Georgia Plan as referred to in the original committee report. On the basis of this oral report, it is the recommendation of this Reference Committee that (1) the Council of the Medical Association of Georgia extend its effort to encourage the members of the Medical Association of Georgia to participate in the Georgia Plan, and (2) that this information be disseminated to the insurance companies desiring to participate in the Georgia Plan, and (3) that the Council of the MAG request a personal explanation from the physician who allegedly transmitted certain information from the Insurance Committee to the Insurance Commissioner of the state of Georgia thereby impeding the work of this Committee.

HOUSE OF DELEGATES ACTION—Adopted the Insurance and Economics Committee report as recommended by the Reference Committee and the Reference Committee recommendation made on the basis of an oral addendum report to the Reference Committee on motion duly made and seconded.

Maternal and Infant Welfare

CHARLES M. MULHERIN, M.D., Augusta, *Chairman*

Two meetings were held this year, one in June and one in November, both at the Academy of Medicine, Atlanta.

The organization for the processing of all maternal deaths by the cooperative action of the physicians concerned with each death, the State Public Health Department, local health department, and the executive office of MAG with the committee acting as over all guide as outlined in last year's committee report is running reasonably smoothly. As a result of this set up, the committee was able during the year to review in an intelligent manner a sufficient number of the accumulated

cases so that it can now see its way to operating on a current basis very shortly. The committee, also, was able to place each case reviewed in its proper place in the classification according to the AMA Guide for Maternal Death Study.

The final letter to the physician stating the committee's opinion as to cause of the death, the factors of avoidability or non-avoidability and its suggestions and recommendations in regard to the case were worked out and many were mailed out.

The cases of unanswered questionnaires were reviewed, (these are those in which the physician has been sent three letters). It was recommended that Mr. Krueger call these physicians and ask them for a reply so that the cases might be completed. Along this same line, it was further recommended that a copy of each letter sent should be on file with the certificates routinely, and letters to hospital administrators, especially, should be individualized from the Chairman, and further that in some cases, a special letter from the chairman should be sent to the individual physician, particularly, in home delivery conditions.

It will be recalled that in its report last year, this committee recommended that the Maternal Infant and Welfare Committee should be composed of two subcommittees. One should use the present members, with the exception of two pediatricians, and should continue the study of the maternal deaths. The other subcommittee should be assigned to the perinatal studies, and would include, in addition to the two present pediatricians, two obstetricians, and two general practitioners. The two subcommittees should meet jointly at least once a year and have planned meetings at other times. Your chairman requested the president to make these appointments and he did so.

Appointed to this Perinatal Mortality Subcommittee were the following physicians:

- H. F. Sharpley, Jr., Savannah, Chairman
- Don Kahle, Atlanta
- E. C. McMillan, Macon
- Charles G. Green, Waynesboro
- Thomas McPherson, Atlanta
- James W. Bennett, Augusta

Dr. Sharpley held an organizational meeting of this subcommittee in February.

The committee felt that it was desirable to sponsor a release on suggested criteria to be considered by the physician when signing a permit for safety for delivery by midwife. A preliminary draft presented by the State Health Department was carefully edited by the group. The secretary is to submit the revised version to the committee members by mail, and if approved, see that it is presented to council.

The possibility of doctor sponsorship for individual midwives was discussed. It was agreed that the State Department of Health should give this consideration, and perhaps set up a trial program in several counties. It was recognized that it would present many problems, and might not be feasible in some places.

The committee recommends that the letters containing the final report to the physician be registered in order to insure continuity of anonymity. It was not settled who would pay the extra mailing cost. The letters are relatively few in number, less than one hundred (100) a year, so the cost would not be great.

The committee wishes to call the attention of all to the fact that it feels that it is necessary to judge the cases in an ideal academic sense, assuming the physician had all knowledge, high technical ability, and all the facilities present in a well organized and properly equipped hospital. Because of the austerity of these criteria, it is more desirable to determine avoidable factors, rather than to label the deaths as preventable. This allows more specific discussion resulting in better maternal care.

In reviewing the avoidable deaths, it is apparent that patient factors of responsibility, chiefly poverty and parity, are outstanding. However, it must be stressed that there were, also, problems of management and lack of hospitals or lack of adequate hospital facilities.

The committee wishes to thank the members of MAG for their cooperation and support during the past year and to request again their continued support and cooperation in this most worth while work.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 approves the report of the Committee on Maternal and Infant Welfare and commends the Committee for its work. The Reference Committee also encourages the active support of the members of the MAG in the work of this Committee.

HOUSE OF DELEGATES ACTION—Adapted the Maternal and Infant Welfare Committee report as recommended by the Reference Committee on motion duly made and seconded.

Medical Defense

CHARLES S. JONES, M.D., Atlanta, *Chairman*

During the last year the Medical Defense Committee of the Medical Association of Georgia has begun to work more closely with the professional liability insurance program of the Medical Association of Georgia. As most doctors in Georgia now know, The Medical Association of Georgia, with the Saint Paul Mercury Indemnity Company, has worked out a co-operative professional liability insurance program in which the State Association, the County Society, and the doctor involved, work closely with the insurance company in attempting to render the best advice and service not only to the doctor, but to the patients who might be involved in professional liability matters. Since this program was put into effect about two and one-half years ago, more than 1,700 doctors have enrolled. This number exceeds the total number of doctors who carried professional liability insurance prior to the program inception. It is encouraging to see the co-operative spirit which is being manifest by the various elements of medicine and the insurance industry.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 recommends the acceptance of the report of the Committee on Medical Defense as written and commends the work and action of this Committee and strongly encourages the wholehearted cooperation of the members of the Medical Association of Georgia in continuing support of the MAG-St. Paul Mercury Indemnity Company Professional Liability Insurance Program.

HOUSE OF DELEGATES ACTION—Adapted by the Medical Defense Committee report as recommended by the Reference Committee on motion duly made and seconded.

Scientific Exhibit Awards

TED F. LEIGH M.D., Atlanta, *Chairman*

The scientific exhibits at the 1957 annual meeting

of the Medical Association of Georgia in Savannah was the most outstanding group that has been assembled for one of our meetings. Many comments were heard regarding the teaching value of this group of exhibits.

The exhibits for this year's meeting are now being assembled, and again there will be an outstanding year. It is gratifying that applications are so well distributed geographically throughout the state, rather than being concentrated in the larger cities. The layout for the scientific exhibits at this year's meeting seems excellent, and there will be more space than usual allotted to this area.

One outstanding feature will be added to this year's scientific exhibits. Two large new exhibit type illuminators have been secured for this year's meeting, and for future meetings. Funds were made available through the Medical Association of Georgia. The boxes are beautifully constructed, and are made in such a way that they can be broken down and placed in packing cases when not in use.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 approves the report of the Committee on Scientific Exhibit Awards and commends the work of the Committee.

HOUSE OF DELEGATES ACTION—Adopted the report of the Committee on Scientific Awards as recommended by the Reference Committee on motion duly made and seconded.

Physician-Lawyer Liaison

HAL M. DAVISON, M.D., Atlanta, *Chairman*

Your special committee on Physician-Lawyer liaison has cooperated with a similar committee from the Bar Association of Georgia and between the two, have formulated a Code of Cooperation to guide lawyers and doctors working for the good of their clients, of each other, and of the public.

The report of this Committee is attached in the form of this Code which has been adopted by your Committee and by the one from the Bar Association.

It is recommended that it be approved and a copy be sent to every member of the Medical Association of Georgia with a request that it be studied and followed.

INTERPROFESSIONAL CODE The Medical Association of Georgia The Georgia Bar Association 1957

PREAMBLE

Part of the practice of law and of medicine is concerned with the problems of persons who require the combined services of a lawyer and of a doctor. The best interests of these persons, of the public as a whole, and of the two professions are best served by the cooperative efforts of all concerned.

There will arise no conflict between the members of these professions if both recognize and admit their mutual responsibility to their profession and to the ethics established by them, to the public, to the individual clients and patients, and to their own honor, dignity and integrity. This code of cooperation is established to promote the public welfare by improving the working relationship of the two professions.

A. GENERAL PRINCIPLES

1. *The Attending Physician and His Patient:* The

medical profession affirms the obligation of a patient's attending physician to cooperate willingly with the patient's attorney in supplying facts, primarily available only to him. The physician should accept the further responsibility of explaining such facts in such a manner that the attorney understands them and can determine their relationship to his client's cause. There should be complete cooperation between the physician and the attorney, each assuming his proper responsibility.

It is for the physician to determine the actuality or probability of facts pertaining to his patient's condition. It is for the attorney to determine now and under what circumstances such facts are to be appropriately presented.

Because of the large number of occasions when medical facts are intricate and difficult to understand, the physician should always provide the attorney with a written summary of them for his study. The physician should carefully preserve his own original records, although with express consent of his patient permitting their physical inspection by, or making a copy of relevant portions available to, his patient's attorney.

A physician should never advise on the amount of damages a patient should seek to recover. The proper province of his professional advice is the extent, degree, or percentage of illness, injury, disability, or similar judgments based upon his professional knowledge of the case. He is not expected to understand technical rules of legal liability, of evidence, or of trial techniques. The latter are the exclusive province of the attorney.

2. *The Attorney and His Client:* It is part of the attorney's oath on his admission to the bar of this state that he will not counsel or maintain any suit or proceeding which shall appear to him to be unjust, or any defense, except as he believes to be honestly debatable under the law of the land. He will employ, for the purpose of maintaining the causes confided to him, such means only as are consistent with truth and honor and will never seek to mislead the judge or jury by any artifice or false statement of law or fact.

In discharge of that oath, it becomes the attorney's responsibility to marshal the facts and to obtain professional and other opinion which, in his judgment, are necessary for his client's case and in a manner consistent with his oath and the ethics of his profession.

It is important that the physician understand that legal proceedings in this country are conducted under what is known as the "adversary system." Under that system the attorney occupies a dual position. He is not alone an officer of the court. He is also the single-minded advocate for his client. He does not and cannot properly represent both sides to a dispute.

This system has developed in recognition of the truth demonstrated countless times that justice can usually be satisfactorily accomplished if the two or more contestants can present their points of view to some neutral third person who can weigh the opposing claims. Such claims are usually presented in the form of a testimony which is offered in question and answer form. The judge of a court or the officer presiding before an administrative tribunal is the referee who weighs the opposing points of view and the conflicts in testimony. In a sense the judge or administrative officer much more nearly approximates the physician's objectively. The physician well knows, however, that in some situations it is also possible for medical men to vary

honestly and sincerely in their physical findings, their treatments, and their evaluation of illness or injury. In some types of court cases the parties prefer to let a group of sworn but interested citizens, the jury weigh and "find" the facts.

B. PHYSICIAN AND ATTORNEY

Unless both attorney and physician agree that it is unnecessary in any particular case, there should always be a conference between the two before going to court. Conferences should be arranged at a time mutually agreeable. The patient's case should be completely reviewed and the doctor should indicate significant facts. The physician should indicate to the attorney the scope and the limitations of his examination and of his knowledge concerning the patient and his condition, so that further knowledge may be obtained, if necessary. If further medical opinion or examination is necessary, the attorney should recommend to his client that this be sought only from properly qualified doctors of medicine.

The attorney, in asking for information and for written reports, should tell the doctor what he especially desires to know. In court, or in reviewing testimony presented by the opposing sides, the client's physician should point out to the client's attorney the strengths and weaknesses in their medical theories and testimony.

The physician should respond to an attorney's request for a conference or for a written report with as much promptness as possible.

C. ATTORNEY AND PHYSICIAN WITNESS

It is unethical for an attorney actually, or by insinuation, to shade the evidence given by a physician. An attorney is justified in testing the competence and credibility of a physician witness, but no ethical attorney will abuse, badger, or browbeat any witness, and no court should allow it.

The medical profession affirms the obligation of a patient's attending physician to cooperate with the patient's attorney in supplying all the information he has concerning the patient-client, to interpret this information as to diagnosis of disease or injuries, the extent and duration of disability, the probable cost of treatment, and as to any other phases which may be desirable for obtaining justice for the patient-client.

It is the doctor's duty to keep accurate and adequate records. These records are the property of the doctor, but upon written request by the patient they may be made available for examination by the patient's attorney or by his adversary; or, upon the written consent of the patient or his attorney copies or resumes of such records may be furnished to the patient's attorney or the adversary attorney. The attorney making the request for the same should always state specifically the information desired.

If a consent medical examination is requested or arranged by a party adverse to the individual being examined, the doctor making the examination shall send his report and copies thereof as directed in the request. The request shall be in writing, and a copy mailed to the adverse party or his lawyer for examination shall be accompanied by the following information in writing:

- (a) The purpose of the examination;
- (b) A brief history of the complaint;
- (c) The person responsible for payment for the examination;

- (d) Any other pertinent information that will assist in making a proper examination and report.

A physician should never interfere with the affairs which are the exclusive province of the attorney. He should not advise the patient concerning the amount of damage he should seek, nor about legal procedures. The physician must realize that he is in court as a witness only and there to testify to the truth. His testimony should never be shaded or biased. He must offer the facts of his diagnosis, of his findings, his treatment and the results and his prognosis. If the character of the case demands his indulgence in speculation, then he should so state and sharply separate facts from his opinions.

In testifying, if necessary for the accuracy of the record and for future reference, a physician may first testify in technical terms in language comprehensible to laymen. A doctor does not represent either side of a controversy. He testifies first as to facts as he found them, and second, as to his opinions based on these facts.

It is recognized that facts are facts and can not be changed, but that the opinion of different physicians based on the same facts may, and often do, vary.

Probabilities, possibilities, and hypothetical situations are never discussed by a medical witness unless they are requested by the court itself or by an attorney. If a physician does not know the answer to a question asked by the attorney or by the court, he should so state and make no further comments unless requested to do so.

Under no circumstance is a medical witness justified in suppressing medical evidence required by the courts in their search for justice.

When a physician who has agreed to offer testimony on a case is approached by attorneys or other representatives for other parties with adverse interests, he should be frank about his prior commitment, notify the attorney for the party for whom he has agreed to testify, and thereafter be guided by the advice of the latter's attorney.

D. PHYSICIAN WITNESS

1. *Conference Before Trial:* It is the duty of each profession to present fairly and adequately the medical questions involved in legal controversies; to that end, the practice of pre-trial discussions, between the physician who is to testify and the lawyer calling such a physician as a witness concerning the medical questions involved, is encouraged and recommended. It is recognized that it is always proper, and in most instances quite desirable from the standpoint of the physician and the lawyer, that a conference should be held between the patient's physician and the patient's lawyer at some mutually convenient time before the physician is to testify. Likewise, the physician who has made an examination of a person at the request of a party adverse to the person examined, and the lawyer planning to call such physician as a witness, should hold a conference at some mutually convenient time before such physician is to testify.

2. *Subpoena for Physician; Conference; Conference Fee:* No physician should take offense at receiving a subpoena. No lawyer should cause a subpoena to be issued for any physician who has examined or treated the lawyer's client without prior conference with such physician concerning the matters regarding which he is

to be interrogated, unless the physician and the lawyer agree that such conference is unnecessary, or unless the physician refuses to confer. The fee, if any, to be charged by the physician to the patient for such conference should be a matter of agreement between the physician, the lawyer, and the patient.

No lawyer should cause a subpoena to be issued for any physician employed by the lawyer, or the lawyer's client, to make an examination of a person adverse to the lawyer's client without prior conference with such physician concerning the matters regarding which the physician is to be interrogated, unless the physician and the lawyer agree that such conference is unnecessary, or unless the physician refuses to confer. The fee, if any, to be charged to the lawyer's client for such conference should be a matter of agreement between the physician, the lawyer, and his client.

3. *Cooperation with Court.* It is recognized that the proper and efficient dispatch of the business of the courts cannot depend upon the convenience of litigants, the lawyers, or the witnesses, including physicians who may be called to testify; both the lawyer and the physician should recognize, accept and discharge their obligation to aid and cooperate with the courts in the presentation of medical testimony.

4. *Arrangements for Court Appearance:* In arranging for the attendance of a physician at a trial, or other legal proceeding, the lawyer should always have due regard and consideration for the professional demands upon the physician's time, and accordingly, the lawyer should whenever possible, give the physician reasonable notice in advance of his intention to call the physician as a witness, of his intention to issue a subpoena for the physician's attendance, and of the probable date on which the physician will be expected to testify; and the lawyer should also advise the physician to bring with him to court such records as the lawyer or the physician may need for the proper presentation of the physician's testimony. Furthermore, during the course of the trial the lawyer should endeavor to keep the physician advised from time to time as to the approximate hour when he will be called to the witness stand; and upon the physician's appearance at the hearing at the hour agreed upon the lawyer should endeavor to arrange with the court for the prompt calling of the physician to the witness stand.

5. *Fee for Court Appearance:* When a physician is called to testify as a witness for his patient, the charge, if any, should be made to the patient. The amount of such charge should be determined by conference between the physician and his patient, or the patient's attorney, well in advance of the physician's appearance in court.

6. *Expert Testimony:* A reasonable expert witness fee is a proper and necessary item of expense in litigation involving medical questions; and when a physician is called to testify as an expert witness he should be paid such expert witness fee as may be agreed upon between the physician and the lawyer calling him; and in every instance in which the lawyer makes arrangements for expert testimony it shall be the duty of the lawyer to see that adequate arrangements for the payment of such expert witness fee have been made.

7. *Contingent Fees:* Neither the physician called as a witness nor the lawyer who called him shall invite or enter into any arrangement whereby the making of a charge

for the physician's appearance as a witness or for the giving of testimony, or the amount of any such charge, shall be contingent on the outcome of the litigation or on the amount of damages awarded in the case.

E. PAYMENT FOR PHYSICIAN'S SERVICES

A lawyer, in disbursing money either after settlement or after judgment has been obtained, has an obligation to use every legitimate means to see that the charges of the attending physician, cost of examination, and expert witness fee are paid by the client.

The lawyer should not charge a fee to the physician for the collection and payment of the physician's charges out of any such proceeds in the hands of the lawyer.

F. JOINT COMMITTEE

The Georgia Bar Association and The Medical Association of Georgia each shall appoint three members who shall serve on a committee, one to serve for a term of one year, one for a term of two years, and one for a term of three years. Thereafter, members shall be appointed for a term of three years. These six members shall constitute the joint medical-legal committee.

Each year the committee shall meet at the proper time and organize itself by electing a chairman and a secretary.

The Georgia Bar Association and the Medical Association of Georgia shall jointly be responsible for any legitimate expenses incurred by this committee. However, the committees shall prepare a tentative budget and apply for appropriations from each organization through customary channels.

This committee shall:

1. Meet at least twice yearly at times agreed to by the majority of the committee and upon call by the chairman, or upon call by three members of the committee.

2. Adopt such rules and regulations as the committee deems necessary to effect the purposes of this code.

3. Attempt to mediate and arbitrate in the first instance on a local level any disagreement arising between individual physicians and individual lawyers, or between the two professions, falling therein, upon written application by a member of either profession, a hearing should be scheduled before this committee.

4. Report annually to the Georgia Bar Association and to the Medical Association of Georgia the work of the committee during the year and make such recommendations as the committee deems desirable.

G. GENERAL PROVISIONS

Nothing contained in this Statement of Principles is intended to alter the rules of law with reference to the attendance of witnesses and fees for their attendance, nor the rules of law with reference to privileged communications.

COMMITTEES

THE MEDICAL ASSOCIATION OF GEORGIA

Hal M. Davison, M.D., *Chairman*

Charles S. Jones, M.D.	A. B. Conger, M.D.
Robert Gottschalk, M.D.	Charles Lamb, M.D.
Enoch Callaway, M.D.	C. H. Richardson, Sr., M.D.
Grady Coker, M.D.	Thomas Godwin, M.D.
W. L. Pomeroy, M.D.	Henry Finch, M.D.
W. Bruce Schaefer, M.D.	Mr. John A. Dunaway, <i>Ex-Officio</i>

THE GEORGIA BAR ASSOCIATION

John A. Dunaway, *Chairman*

J. C. Ford, Jr.

Oscar M. Smith

Cubbedge Snow, Sr.
Ellis B. Barrett
Byron H. Mathews, Jr.
A. Walton Nall
Hilliard P. Burt

Shelby Myrick, Jr.
Glenn W. Ellard, *Vice-Chairman*
J. H. Highsmith
John F. Hardin
James H. Fort

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 recommends the acceptance of the report of the Physician-Lawyer Liaison Committee and approves the recommendation that a copy of the Interprofessional Code be sent to every member of the MAG with the request that it be studied and followed.

HOUSE OF DELEGATES ACTION—Adopted the Physician-Lawyer Liaison Committee report as recommended by the Reference Committee on motion duly made and seconded.

School Child Health

THOMAS C. MCPHERSON, M.D., Atlanta, *Chairman*

This committee was set up in January 1958, and is composed of the following members: Thomas C. McPherson, Chairman, Edwin Shepard, Maurice F. Arnold, M.D. Pittard, Virginia McNamara.

The organizational meeting of the committee is scheduled to take place on March 14, 1958, at which time Dr. Donald A. Dukelow of the Bureau of Health Education of the American Medical Association is expected to meet with the committee members to help in the organization of thought and action for the coming year.

A committee, will, I believe, invite all of the County Medical Societies to appoint similar committees and will do everything possible to aid and encourage the organization of such committees at local levels. As soon as possible an orientation meeting will be held with all of the chairmen and as many members of the various county society committees as it is possible to assemble, at which time reasonable and feasible stepwise proposals for action will be disseminated. The Committee's program will aim at simplification, standardization, and improvement in procedures and practice of medical supervision of the health of the school child. It will surely wish to try to establish, improve, strengthen, and enhance the effectiveness of liaison between school authorities, public health personnel, and family physicians and pediatricians. One of its aims will surely be to foster the development in parents and doctors and educators of that attitude of thought which will lead to more widespread practice of a program of continuous health supervision from birth through the school years. The inevitable effect on the incidence of preventable contagious diseases, accidents, and even emotional disturbances, etc., of the success of such a program, is obvious.

The Committee's area of work is potentially great enough that one can foresee the possibility of the individual members becoming discouraged at the enormosity of the task and permitting the committee to flounder in its infancy. It is to be hoped that through judicious and realistic thought and planning the committee can set itself to first comprehend the true function of such a body and then to proceed through concerted action toward attainable goals, each of which can serve as a point of departure for further work.

As this committee was formed after the budget for the fiscal year had been set up, no budgetary allotment has been made, and none is anticipated. Minimum expenses are expected during the first year of operation, and it is expected that these will be borne out of

general funds and by special appropriation from council when necessary.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 approved the report of the Committee on School Child Health and commends the Committee for its work.

HOUSE OF DELEGATES ACTION—Adopted the Committee on School Child Health report as recommended by the Reference Committee on motion duly made and seconded.

Retirement Fund

RICHMOND COUNTY MEDICAL SOCIETY

WHEREAS, the MAG is concerned with the problems inherent in physicians retirement, and

WHEREAS, the MAG has established a benevolent fund for the purpose of aiding indigent physicians on retirement if the county society so requests and matches the amount up to \$50 per month,

WHEREAS, this may become an increasing responsibility of both the MAG and the local society,

THEREFORE, BE IT RESOLVED, that the House of Delegates direct the appropriate committee to investigate the possibility of a self-sustaining retirement fund for its entire membership on a sound fiscal basis, and

BE IT FURTHER RESOLVED that this investigation include the possibility that any assessments, dues, etc., that may be incurred by the members of the MAG under such a plan be of an income tax deductible nature, and

BE IT FURTHER RESOLVED, that this appropriate committee report to Council the results of said investigation at the earliest possible time.

REFERENCE COMMITTEE RECOMMENDATION—Reference Committee No. 5 accepts Resolution No. 2: Retirement Fund for information and requests that the Council of the Medical Association of Georgia investigate this important matter and take such action as it deems necessary.

HOUSE OF DELEGATES ACTION—Adopted the Reference Committee recommendation in regard to Resolution No. 2: Retirement Fund on motion duly made and seconded.

It was moved by Chairman of Reference Committee No. 5, H. H. Hammett, Jr., LaGrange, and duly seconded that the report of Reference Committee No. 5 be accepted as a whole and it was so ordered.

Speaker Goodwin called for Unfinished Business, and there being none, he then called for new business. There being no New Business, Speaker Goodwin recognized Dr. C. H. Richardson, Sr., Bibb County.

Dr. Richardson expressed his deep appreciation of the expression of sympathy from the membership on the recent death of his wife. Dr. Richardson further expressed his wish that the membership consider contributions to the AMEF. Speaker Goodwin also recognized Spencer Kirkland, AMA Delegate, who also heartily endorsed Dr. Richardson's sentiment on contributions to AMEF.

There being no further business, Speaker Goodwin entertained a motion for adjournment of the Second Session of the MAG House of Delegates which was duly made and seconded at 10:45 a.m., April 30, 1958.

GENERAL BUSINESS SESSION

MONDAY, APRIL 28, 1958

THE GENERAL BUSINESS Session of the *104th Annual Session of the Medical Association of Georgia was called to order by President W. Bruce Schaefer, Toccoa, at 11:55 a.m. in the Macon Auditorium, Macon, Georgia.

President Schaefer recognized Mr. Carl Park and Mr. Gabriel McClure of Schering Corporation who presented a medical-historical map of Georgia to the Medical Association of Georgia through the courtesy of Schering Corporation.

Upon completion of this presentation, President Schaefer relinquished the gavel to First Vice-President T. A. Peterson, Savannah. President Schaefer then delivered the President's Address and following this address, he again assumed the duties of presiding officer.

President Schaefer appointed a Teller's Committee of Charles E. McArthur, Cordele, Chairman; W. Mercer Moncrief, Atlanta, and Charlotte S. Neuberger, Macon.

President Schaefer then called for nominations from the floor for Association officers and nominations were made as follows:

Nominations

President-Elect—Luther H. Wolff, Columbus: nominated by H. H. Boyter, Columbus; and seconded by W. G. Elliott, Cuthbert; C. N. Wasden, Macon; and J. C. Patterson, Cuthbert.

First Vice-President—George H. Alexander, Forsyth: nominated by Herbert M. Olnick, Macon, and seconded by T. L. Ross, Macon.

Second Vice-President—Charles W. Hock, Augusta: nominated by W. A. Wilkes, Augusta, and seconded by Jack C. Norris, Atlanta, and C. M. Templeton, Augusta.

AMA Delegate (term beginning January 1, 1959)—Eustace A. Allen, Atlanta: nominated by Fred H. Simonton, Chickamauga, and seconded by Ralph H. Chaney, Augusta, and J. G. McDaniel, Atlanta.

AMA Alternate Delegate—Thomas J. Anderson, Atlanta: nominated by Alton V. Hallum, Atlanta, and seconded by Linton H. Bishop, Jr., Atlanta. Thomas A. McGoldrick, Jr., Savannah: nominated by James C. Metts, Savannah, and seconded by John L. Elliott, Savannah, and C. F. Holton, Savannah.

AMA Delegate (term beginning January 1, 1959)—Spencer A. Kirkland, Atlanta, nominated by J. C. Patterson, Cuthbert; seconded by John W. Turner, Atlanta; Allen H. Bunce, Atlanta; H. Dawson Allen, Milledgeville; W. A. Selman, Atlanta; C. F. Holton, Savannah; and Grady N. Coker, Canton. Henry H. Tift, Macon: nominated by Maurice F. Arnold, Hawkinsville, and seconded by Milford B. Hatcher, Macon; F. G. Eldridge, Valdosta; William P.

Harbin, Rome; and David R. Thomas, Jr., Augusta.

AMA Alternate Delegate—W. G. Elliott, Cuthbert: nominated by John Turner, Atlanta; and seconded by John L. Elliott, Savannah; and Luther H. Wolff, Columbus.

President Schaefer then referred to Chapter V, Section 2 of the MAG Constitution and By-Laws as follows: "Nominations for Councilors and Vice-Councilors shall be made by each District Society at its annual meeting and forwarded by its Secretary to the Secretary of the Association not less than 15 days before the Annual Session. If no nomination is presented by a District Society in this manner, nominations shall be made from the floor."

President Schaefer stated that no nomination had been received from the First District for the office of Councilor and Vice-Councilor and nominations from the floor were in order.

First District Councilor—Charles T. Brown, Guyton: nominated by Walter E. Brown, Savannah; and seconded by T. A. Peterson, Savannah.

First District Vice-Councilor—T. A. Peterson, Savannah: nominated by Lee Howard, Savannah, and seconded by the Chatham County Delegation.

President Schaefer then read the nominations for Councilor and Vice-Councilor from the Second, Third, and Fourth District as received by letter from the respective districts as follows:

Second District Councilor—George R. Dillinger, Thomasville.

Second District Vice-Councilor—J. Z. McDaniel, Albany.

Third District Councilor—W. G. Elliott, Cuthbert.

Third District Vice-Councilor—Luther H. Wolff, Columbus.

Fourth District Councilor—Virgil B. Williams, Griffin.

Fourth District Vice-Councilor—George P. Kinnard, Newnan.

President Schaefer stated that nominations to an office without opposition tantamount to election and instructed the membership that the only contested offices were that of AMA Delegate and AMA Alternate Delegate. The hours of balloting for voting were announced by President Schaefer.

There being no further business, the first General Session of the *104th Annual Session of the Medical Association of Georgia was adjourned at 1:05 p.m.

GENERAL BUSINESS SESSION (Second Session)

WEDNESDAY, APRIL 30, 1958

THE SECOND GENERAL Business Session of the *104th Annual Session of the Medical Association of Georgia was called to order by President W. Bruce Schaefer at 11:30 a.m. in the Macon Auditorium, Macon, Georgia.

President Schaefer announced that a compilation of the official attendance at the *104th Annual Session was as follows: Member M.D.'s, 682; Guest M.D.'s, 74; Association guests, 43; Exhibitors, 150 for a grand total of 949 registered.

Presentation of Georgia State Chamber of Commerce Resolution

President Schaefer recognized Mr. P. L. Hay, Macon, representing the Georgia State Chamber of Commerce, who presented to the Medical Association of Georgia, a resolution of appreciation from the Georgia State Chamber of Commerce reading as follows:

"A Resolution—WHEREAS, it has come to the attention of the Georgia State Chamber of Commerce that despite Georgia's leadership in the rehabilitation of the physically handicapped, it is becoming increasingly more difficult for persons who have heart disease, epilepsy, and diabetes to find and retain employment; and,

"WHEREAS, studies and research conducted by the Vocational Rehabilitation Service medical and heart associations, and other interested groups, indicate that such persons, when properly placed are able to work and that normal employment actually prolongs the life of many persons afflicted with the above mentioned diseases; and,

"WHEREAS, surveys show that the major deterrent to employment of such persons is the courts liberal interpretation of the Georgia Workmen's Compensation Act which places liability on the employer for attacks and seizures which occur on the job but which are not caused by the work, and

"WHEREAS, in order to correct this inequity which causes thousands of Georgians who are able and willing to work to remain unemployed, the Medical Association of Georgia sponsored legislation in the 1957 session of the Georgia General Assembly to amend the Georgia Workmen's Compensation Act;

"THEREFORE, BE IT RESOLVED, that the Board of Directors of the Georgia State Chamber of Commerce hereby commend the Medical Association of Georgia for its untiring efforts to cor-

rect this inequity and thereby to foster the employment of Georgians afflicted with heart disease, epilepsy, diabetes, and other similar infirmities."

Fifty Year Certificates

President Schaefer presented 50 year certificates to physicians who have practiced medicine for 50 years or more. These presentations were made to the following physicians: W. J. Cranston, Augusta; W. A. Arnold, Atlanta; O. B. Bush, Atlanta; Henry D. Youmans, Lyons; George L. Echols, Milledgeville; W. H. Houston, Colquitt; N. J. Newsom, Sandersville; Charles Usher, Savannah; Harold Shield, Chickamauga; K. W. Milligan, Augusta; Robert G. Stephens, Washington; H. J. Rosenberg, Atlanta; Guy G. Lunsford, Atlanta; W. P. Durham, Abbeville; and, Dallas N. Thompson, Elberton.

Hardman Cup Award

President Schaefer presented the Hardman Cup Award to Dr. Enoch Callaway of LaGrange. Dr. Schaefer commented that Mr. Lamartine Hardman of Commerce, Georgia, could not be at this session to make the award as he has in the past years, but that he had asked that the following remarks be made: "On learning the name of the recipient of the Hardman Award who is Dr. Enoch Callaway, Mr. Hardman felt that it was in the true spirit of the award that this physician was chosen. Mr. Hardman then cited the inscription on a desk set of his Father's who established this award, the late Georgia Governor Lamartine Hardman, Sr. The inscription read: 'To commemorate the first appropriation from the state of Georgia for cancer aid and research to the Steiner Clinic, Atlanta, August 28, 1929.'"

Certificates of Appreciation

President Schaefer called on Association Secretary Chris J. McLoughlin who presented the Certificates of Appreciation in behalf of the Association to the following physicians: E. P. Holder, Jr., Eastman; H. M. Edge, Blairsville; J. Lee Walker, Clarkesville; Mrs. John L. Elliott, Savannah; C. J. Roper, Jasper; Marcus Mashburn, Sr., Cumming; Charles M. Mulherin, Augusta; T. A. Peterson, Savannah; George F. Lull, Chicago, Illinois; and, W. Bruce Schaefer, Toccoa.

President's Key

President Schaefer recognized W. G. Elliott, Cuthbert, who presented the President's Key to the outgoing President W. Bruce Schaefer for his service to the Association. At this time, Chris J. McLoughlin rose to present to Dr. Schaefer a bound copy of the Journals of the Medical Association of Georgia published during the term of his office.

Scientific Awards

President Schaefer called on Ted F. Leigh, Chairman of the Association Scientific Award Committee, who made the following presentations:

First Place Award—"Diagnosis and Management of Malignant Melanoma"—

Garland D. Perdue, M.D., Ralph Vogler, M.D., and Sam A. Wilkins, M.D., Atlanta

Second Place Award—"Radiation Protection in Diagnostic Radiology"—

H. S. Weens, M.D., W. H. Shuford, M.D., R. H. Rohrer, Ph.D., and H. D. Youmans, B.S., Atlanta

Third Place Award—"Double Pointed Needle for Use in Cardiovascular Surgery"—

Glynn-Brunswick Memorial Hospital Staff

Honorable Mention—"Obstetric Pelvimetry Making Use of the Rectal Canal"—

Richard Torpin, M.D., Augusta

Honorable Mention—"Problems in Diagnosis and Treatment of Diseases of the Chest"—

David P. Hall, M.D., Burton M. Haine, M.D., and Robert G. Ellison, M.D., Augusta

Honorable Mention—"Surgical Correction of Deafness"—

Claude L. Pennington, M.D., Macon

Distinguished Service Award

President Schaefer presented the Association Distinguished Service Award to Dr. Allen H. Bunce of Atlanta. Dr. Bunce expressed his appreciation as the first recipient of this new Association award.

Golf Awards

President Schaefer called on George T. DuPree for the presentation of the Golf Awards which are as follows:

Low Gross—William H. M. Weaver, Macon

Low Net—Calder B. Clay, Jr., Macon

Second Low Gross—J. A. Simpson, Athens

Second Low Net—Thomas H. Williams, Macon

High Score—W. H. Somers, Macon

1959 Meeting Site

President Schaefer announced that the next order of business was the selection of a 1959 meeting site,

and a formal invitation in behalf of the Richmond County Medical Society was extended to the Medical Association of Georgia to meet in Augusta in 1959 on the occasion of the Association's *105th Annual Session. This motion was approved and the invitation accepted.

Election Results

President Schaefer called on Tellers Committee Chairman Charles McArthur who announced that the contested office of AMA Delegate had been won by Henry Tift, Macon, and that the contested office of AMA Alternate Delegate had been won by Thomas McGoldrick, Savannah.

Installation of Officers

The next order of business was the installation of the 1958-59 officers which are as follows:

President—Lee Howard, Sr., Savannah (1959)

President-Elect—Luther H. Wolff, Columbus (1959)

Immediate Past President—W. Bruce Schaefer, Toccoa (1959)

First Vice-President—George H. Alexander, Forsyth (1959)

Second Vice-President—Charles W. Hock, Augusta (1959)

AMA Delegate (term beginning January 1, 1959)—Eustace A. Allen, Atlanta (1960)

AMA Alternate Delegate (term beginning January 1, 1959)—Thomas A. McGoldrick, Savannah (1960)

AMA Delegate (term beginning January 1, 1959)—Henry H. Tift, Macon (1960)

AMA Alternate Delegate (term beginning January 1, 1959)—W. G. Elliott, Cuthbert (1960)

First District Councilor—Charles T. Brown, Guyton (1961)

First District Vice-Councilor—T. A. Peterson, Savannah (1961)

Second District Councilor—George R. Dillinger, Thomasville (1961)

Second District Vice-Councilor—J. Z. McDaniel, Albany (1961)

Third District Councilor—W. G. Elliott, Cuthbert (1961)

Third District Vice-Councilor—Luther H. Wolff, Columbus (1961)

Fourth District Councilor—Virgil B. Williams, Griffin (1961)

Fourth District Vice-Councilor—George P. Kinnard, Newnan (1961)

President W. Bruce Schaefer then turned over the gavel to President Lee Howard, Sr., for the installation of these officers.

President Howard delivered an address, and on completion of his remarks the meeting was adjourned at 12:35 p.m.

FINAL 1957-58 COUNCIL MEETING, APRIL 26, 1958

THE FINAL MEETING of the 1957-58 Council of the Medical Association of Georgia was held at 8:00 p.m., Saturday, April 26, 1958 in the Pine Room, Hotel Dempsey, Macon, Georgia. The meeting was called to order by Chairman George Dillinger, Thomasville.

Present in addition to Dr. Dillinger were the following: W. Bruce Schaefer, Toccoa, President; Lee Howard, Sr., Savannah, President-Elect; T. A. Peterson,

Savannah, 1st Vice-President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; Charles T. Brown, Guyton, 1st District Councilor; George R. Dillinger, Thomasville, 2nd District Councilor; W. G. Elliott, Cuthbert, 3rd District Councilor; J. W. Chambers, LaGrange, 4th District Councilor; J. G. McDaniel, Atlanta, 5th District Councilor; Henry H. Tift, Macon, 6th District Councilor; D. Lloyd Wood, Dalton, 7th

District Councilor; F. G. Eldridge, Valdosta, 8th District Councilor; Charles Andrews, Canton, 9th District Councilor; and, Addison Simpson, Jr., Washington, 10th District Councilor. The following Vice-Councilors were present: Luther H. Wolff, Columbus, 3rd District; Virgil B. Williams, Griffin, 4th District; Charles S. Jones, Atlanta, 5th District; George H. Alexander, Forsyth, 6th District; Ralph W. Fowler, Marietta, 7th District; James M. Hicks, Brunswick, 8th District; Paul T. Scoggins, Commerce, 9th District. Also present were: Thomas W. Goodwin, Augusta, Speaker of the House of Delegates; Eustace A. Allen, Atlanta, AMA Delegate; Edgar Woody, Jr., Editor of the *Journal*, guest, Gunnar Gundersen, LaCrosse, Wisconsin, AMA President-Elect. Representing the MAG Headquarters Office were Messrs. John F. Kiser and Milton D. Krueger.

Minutes of the Council meeting of March 15-16 and Executive Committee meetings of March 16 and April 13 were reviewed by Mr. Krueger and approved with the correction of the April 13 Executive Committee minutes made to include all 13 points of the MAG-FCMS building agreement.

VA Fee Schedule

Dr. McLoughlin presented a proposal from the Veterans Administration in regard to the VA fee schedule. It was voted to reaffirm Council's previous position and not accept the allowances recommended by VA on items 0140, 0145, 0150, and 0155 nor negotiate a contract which does not include MAG proposed fees for these services.

Formation of Franklin-Hart-Elbert Medical Society

Mr. Kiser presented a request for new charters from the Newton-Rockdale Medical Society and Elbert-Franklin-Hart Medical Society. It was voted to approve these mergers and issue charters as requested.

Talmadge Hospital Policy

Dr. Dillinger presented background information concerning recent developments in negotiations with the Medical College of Georgia and the Richmond County Medical Society concerning the operation of the Eugene Talmadge Memorial Hospital.

He discussed the meeting held by the AMA Mediation Committee in Augusta and presented the following agreement reached at this meeting:

PROPOSED OPERATIONAL POLICIES FOR THE MEDICAL COLLEGE OF GEORGIA AND THE EUGENE TALMADGE MEMORIAL HOSPITAL AND PROPOSALS FOR RELATIONS WITH MEDICAL SOCIETIES AND ASSOCIATIONS

Augusta, Georgia, April 15, 1958

Liaison Committee

It was agreed that a liaison committee would be established to be constituted as follows. The district medical societies shall propose two names each and the Medical College of Georgia is to choose one name of the two. One member from each of the ten districts will provide ten members for the Liaison Committee. In addition, the Liaison Committee shall include an Executive Committee of two members of the Richmond County

Medical Society to be chosen by RCMS, two members from the Medical College of Georgia to be chosen by the Medical College, and one member of the Medical Association of Georgia, who resides outside of Richmond County, to be chosen by the Council of the Medical Association of Georgia. The full fifteen-man Committee shall meet once every six months. The Executive Committee, the Chairman of which shall be the MAG representative, shall meet as often as necessary and shall have power to deal with all matters subject to report to the full Liaison Committee.

Admissions

It is not and shall not become the policy of the Medical College of Georgia and the Eugene Talmadge Memorial Hospital to enter into the competitive practice of medicine. Admission of patients of unusual teaching interest shall be favored. It is realized, however, that emergencies and unusual circumstances will arise in which patients who are not indigent will require the services of these institutions. No other pay (private) patients shall be admitted. This policy shall apply to both in and out patients.

The term "unusual circumstances" shall be understood to apply to those patients whose problems in the opinion of their referring doctor can be especially appropriately cared for at the Eugene Talmadge Memorial Hospital. Any question or controversy arising will be referred to the Liaison Committee in writing for the Committee's consideration.

No patient may be accepted by the institution except by proper referral of his *regular attending physician*.

Pay (private) patients admitted under the category of emergencies without referral by a doctor should be discharged or transferred from the Eugene Talmadge Memorial Hospital when and if their condition permits.

Disposition of Professional Fees

Faculty members providing professional services to patients of the Hospital shall determine the charges for such services. The fees paid to the faculty members for such professional services may be paid into a special research fund. This special research fund shall not accrue to the general budget of the Board of Regents, Eugene Talmadge Memorial Hospital, or the Medical College of Georgia. Such special fund shall be used exclusively to defray the cost of medical research projects.

The faculty of the Medical College of Georgia shall determine the character and extent of such medical research projects to be supported by these funds. There shall be no contractual obligation between the Medical College of Georgia and its faculty members to pay such professional fees into the Special Research Fund.

Public Relations

Publicity emanating from the Medical College of Georgia and the Eugene Talmadge Memorial Hospital shall be in good taste and consistent with

the standards of the American Medical Association and the standards set by the Liaison Committee.

It was voted to approve this new policy for the Eugene Talmadge Memorial Hospital and refer it to the House of Delegates for their consideration with the recommendation that the House of Delegates approve it. This motion carried unanimously.

Dr. Dillinger then discussed the tentative selection by Council of one MAG representative for the proposed MAG-RCMS-Medical College of Georgia Liaison Committee. It was then voted to appoint W. Bruce Schaefer, Toccoa, as the MAG representative on this Committee, subject to approval of the Operational Policies by the House of Delegates.

Dr. McLoughlin then presented a statement submitted by MAG Special Attorney Frank Shackelford for his services in regard to the Talmadge Hospital problem in the amount of \$3,000. It was voted to pay this bill and to thank Mr. Shackelford for his services. It was recommended that he be notified that when the MAG needs special legal counsel in the future, he will be contacted.

MAG Headquarters Office Building

Dr. McLoughlin presented information on negotiations with the Fulton County Medical Society concerning the use of a portion of their lot in the rear of the Academy of Medicine. He described several meetings at which tentative agreements have been discussed.

It was voted to offer a Supplemental Council Report on this matter for consideration of the House of Delegates as follows:

"The Council recommends to the House of Delegates that Council be empowered to proceed with the purchase or lease of suitable property for an MAG Headquarters Office building and further be empowered to make contractual arrangements for the erection and maintenance of said building."

It was voted to pay \$250.00 to the architect, Mr. Altman for work already accomplished by him, this payment to be charged to the contingent fund.

School Child Health Committee Request

Mr. Krueger presented information from the School Child Health Committee concerning a request for \$75.00 to be used to purchase certain books for the members of that Committee. It was voted to buy one set of books for the use of Committee members to be charged to a contingent fund.

Medicare Indemnity Action

Dr. McLoughlin presented information concerning MAG endorsement of an indemnity plan under Medicare. He read a recent letter from Texas State Medical Association concerning their action in regard to refusal to participate in any and all government contracts involving full-service payments.

Dr. McLoughlin then presented the following resolution which was approved and referred to the House of Delegates as a Supplementary Report of Council.

WHEREAS, the doctors of medicine of the State of Georgia are convinced that under Public Law 569, 84th Congress, an indemnity-type plan for Medicare is permissible, and

WHEREAS, the physicians of Georgia take exception to the imposition of a service type program, and

WHEREAS, the physicians of Georgia believe sincerely that a service type Medicare program interferes in principles and in practice with doctor-patient relationship and contributes to the deterioration of good medical practice.

NOW, THEREFORE BE IT RESOLVED, that the Medical Association of Georgia pursue whatever course of action is deemed necessary to obtain an indemnity-type Medicare program for the state of Georgia.

Monthly Budget Report

Dr. J. G. McDaniel presented information concerning the monthly budget and reported that the finances of the Association were in good order.

Annual Session Plans

Mr. Krueger presented information concerning the three awards, Distinguished Service Award, Hardman Award and Georgia Practitioner of the Year Award. There then followed miscellaneous discussion concerning plans for the Annual Session and a report by Dr. Henry Tift concerning local arrangements and plans for the *104th Annual Session.

Hal M. Davison

Dr. McLoughlin reported on the death of the Immediate Past President Hal M. Davison and also discussed the tray which had been purchased through subscription by individual members of Council. It was voted that this tray be placed as a memorial in the MAG Headquarters Office Building.

Dr. McLoughlin discussed Dr. Davison's great service to the Association and there was a moment of silence in his honor and memory.

Unfinished Business

(a) Dr. McLoughlin presented a statement from Mr. Dunaway concerning his participation in the defense of Dr. Exum Walker's suit. It was voted to refer this matter to the Secretary-Treasurer and the Executive Secretary for mediation and payment.

(b) *Insurance Matters*—Dr. Jones described activities of the recent meeting with the Insurance Commissioner Zack Cravey and brought out the fact that so far nothing had been accomplished in writing. After discussion it was voted to instruct Dr. Jones to contact Mr. Dunaway, who in turn is to get in touch with Mr. Cravey so that a definite statement in writing may be in the hands of the office of the Association prior to the adjournment of the Annual Session.

(c) *Medicare*—Dr. Jones discussed the MAG presentation at the Medicare Advisory Committee meeting in Washington on May 9 and requested that Mr. Arndt be authorized to accompany him to Washington.

After considerable discussion, it was voted that Mr. Arndt accompany Dr. Jones to Washington for this presentation.

(d) Dr. Jones presented certain information concerning MAG's accident sickness policy with Provident Life

and Accident Insurance Company and this matter was referred to the Insurance Committee to be reported on at the Organizational Meeting of the 1958-59 Council.

New Business

(a) The following resolution in regard to the AMA Mediation Committee was submitted by Dr. Dillinger and was approved and referred to the House of Delegates as a supplementary report to Council.

WHEREAS, in many states diversity of opinion arises between state and local medical organizations and the medical schools concerning ethics and other matters to the detriment of American medicine.

NOW, THEREFORE BE IT RESOLVED by the Council and the House of Delegates of the Medical Association of Georgia that the Board of Trustees of the American Medical Association be authorized by the AMA House of Delegates to give thought and consideration to the setting up of a permanent mediation committee or board, to be set up jointly by the American Medical Association and the Association of American Medical Colleges and that board or committee be available, when requested by the local medical organization of the Medical Association or medical college for the purpose of mediating such difficulties.

AND, BE IT FURTHER RESOLVED THAT the Council and the House of Delegates of the Medical Association of Georgia authorize their delegates to the

American Medical Association to introduce this resolution to the House of Delegates of the American Medical Association at the coming San Francisco session.

(b) *Industrial Health Council*—Dr. Schaefer presented a letter from Dr. Dunaway concerning a request that the MAG endorse the Industrial Health Council of Georgia for its services in any county in the state with or without the approval of the local county medical society.

After discussion it was voted that this problem will remain subject to the approval of the local county medical society and that Mr. Dunaway be written that the MAG does not have this type of jurisdiction in the individual areas of the county medical societies as was so stated in prior Council action.

(c) Dr. Chambers spoke to the members of Council in regard to his attendance at his final Council meeting. He assured the members that it had been a pleasure to serve for 10 years and a privilege to know the members of the Council, and he also informed them that no longer being a member of Council would not decrease his interest in the Council and the activities of the MAG. He assured the members that his successor was well chosen and would make an excellent Councilor.

Dr. Dillinger expressed appreciation as Chairman of Council to Dr. Chambers and thanked all members for their interest and activity during the past year.

There being no further business, the meeting was adjourned.

FIRST MEETING 1958-59 COUNCIL, APRIL 30, 1958

PRESIDENT LEE HOWARD, SR., called the Organizational Meeting of the 1958-59 Council to order at 12:35 p.m., April 30, 1958, in the Macon Auditorium, Macon, Georgia.

Officers and Councilors present were: Lee Howard, Sr., Savannah, President; Luther Wolff, Columbus President-Elect; W. Bruce Schaefer, Toccoa, Immediate Past President; Charles Hock, Augusta, 2nd Vice-President; Thomas W. Goodwin, Augusta, Speaker of the House; Chris J. McLoughlin, Atlanta, Secretary; Charles T. Brown, Guyton, 1st District Councilor; George R. Dillinger, Thomasville, 2nd District Councilor; W. G. Elliott, Cuthbert, 3rd District Councilor; Virgil Williams, Griffin, 4th District Councilor; J. G. McDaniel, Atlanta, 5th District Councilor; Henry H. Tift, Macon, 6th District Councilor; D. Lloyd Wood, Dalton, 7th District Councilor; F. G. Eldridge, Valdosta, 8th District Councilor; Charles Andrews, Canton, 9th District Councilor; and, Addison Simpson, Jr., Washington, 10th District Councilor.

Also present were: Vice-Speaker of the House of Delegates Fred H. Simonton, Chickamauga; Vice-Councilor of the 1st District T. A. Peterson, Savannah; Vice-Councilor of the 7th District Ralph Fowler, Marietta; Vice-Councilor of the 8th District James M. Hicks, Brunswick; Vice-Councilor of the 9th District Paul T. Scoggins, Commerce; and Vice-Councilor of the 10th District David R. Thomas, Jr., Augusta. Messrs. M. D. Krueger and John F. Kiser were present.

Election of Chairman and Vice-Chairman of Council 1958-59

It was voted that George R. Dillinger be elected Chairman of Council for 1958-59 and that J. G. McDaniel be elected Vice-Chairman of Council for 1958-59.

President Howard then turned the chair over to Chairman of Council George R. Dillinger.

Appointment of Journal Editor 1958-59

Chairman Dillinger called for the appointment by Council of the Editor of the *Journal of the Medical Association of Georgia* and it was voted that Edgar Woody, Jr., be appointed editor of the *JMAG* for 1958-59.

Finance Committee of Council Appointment

Chairman Dillinger then announced by authority of the Constitution and By-Laws the Council Committee on Finance as appointed by the Chairman of Council was J. G. McDaniel, Atlanta, Chairman; Charles Andrews, Canton; and, Virgil Williams, Griffin.

At this point, the Council meeting was recessed for five minutes during which time the Executive Committee of Council met. The Organizational meeting of the 1958-59 Council was then reconvened by the Chairman and called to order.

Council Approval of Executive Committee Appointment of Association Treasurer 1958-59

Executive Committee having met in the above stated interim announced the appointment of Chris J. McLoughlin as Association Treasurer for 1958-59 and it was voted to confirm this appointment. It was also moved that the Association Secretary contact legal counsel to clarify the wording of the Constitution and By-Laws requiring two signatures on Association disbursements if the Secretary and Treasurer be other than the same person and whether or not two signatures are required if these two offices be held by the same person. It was also voted that the Council confirm the Executive Committee selection of Mr. Krueger as Executive Secretary for 1958-59.

Date and Site of Executive Committee of Council Meeting

It was approved that the Executive Committee of Council would hold their June meeting on Sunday, June 1st, in Atlanta, Georgia.

Date and Site of Next Council Meeting

On invitation from Vice-Speaker of the House Fred

Simonton, it was moved and seconded that the next meeting of Council would be held at the Simonton Farm near Centralhatchee, Georgia, on July 12-13, 1958.

New Business

It was moved that a Council MAG Building Committee be authorized to further negotiate plans for the MAG Headquarters Office Building and that this Committee consist of the Association President, Chairman of Council, Immediate Past President, Chairman of Finance, and the Secretary as Chairman of this Committee, and further that this committee be empowered to spend up to \$500 for any necessary commitments and this sum to be charged to the Building Fund.

Dr. Thomas requested Council's approval of the change in the present Provident Life and Accident Insurance disability program; said change being left to the discretion of each individual policy holder who will be informed of this alteration by the Provident Life and Accident Insurance Company; still allowing the individual policyholder to retain the present arrangement without alteration if he so chooses. It was voted to proceed with this matter with Council approval.

There being no further business, Chairman Dillinger then called the meeting adjourned.

SPECIAL MEETING OF COUNCIL, JUNE 1, 1958

CHAIRMAN OF COUNCIL, George R. Dillinger called the special meeting of the Council of the Medical Association of Georgia to order at 1:10 p.m. in the Academy of Medicine, Atlanta, June 1, 1958.

Council members present included Lee Howard, Sr., Savannah, President; Luther H. Wolff, Columbus, President-Elect; W. Bruce Schaefer, Toccoa, Immediate Past President; George H. Alexander, Forsyth, 1st Vice-President; Charles W. Hock, Augusta, 2nd Vice-President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; Fred H. Simonton, Chickamauga, House of Delegates Vice-Speaker (For speaker Thomas W. Goodwin); Charles T. Brown, Guyton, 1st District; George R. Dillinger, Thomasville, 2nd District; Willis P. Jordan, Columbus, 3rd District (For Councilor W. G. Elliott); Virgil Williams, Griffin, 4th District; J. G. McDaniel, Atlanta, 5th District; George Alexander, Forsyth, 6th District (For Councilor Henry H. Tift); D. Lloyd Wood, Dalton, 7th District; C. R. Andrews, Canton, 9th District; and Addison Simpson, Jr., Washington, 10th District. Also present were Dr. Eustace A. Allen, Atlanta, AMA Delegate and Messrs. M. D. Krueger and John F. Kiser, Headquarters Office Staff.

Call of Meeting

Chairman Dillinger stated that the official call for this special meeting of the Council was to consider negotiations for the proposed MAG Headquarters Build-

ing per the 1958 House of Delegates recommendation. At this time Chairman Dillinger called in Secretary Chris J. McLoughlin.

Proposed MAG Headquarters Building

Dr. McLoughlin, Chairman of the Headquarter Office Building Committee of Council reviewed the situation concerning MAG negotiations with Fulton County Medical Society and other sites as investigated by his committee. At this time the Council recessed to visit a site and building under construction. After this visit the Council was reconvened and general discussion ensued. After discussion the following action took place.

It was voted that the Council building committee should obtain an option on said site and building; said option to cost no greater than \$100 to be charged to the building investigation appropriation of \$500; and said option to be obtained at the best purchase price possible. The Chairman was requested to report to the Council at their next meeting.

It was voted to investigate ways and means of fund raising for the proposed MAG Headquarters Building; said investigation to be initiated by the Building Committee and the Executive Secretary with the results of this investigation to be presented at the next Council meeting.

The meeting was adjourned at 3:30 p.m.

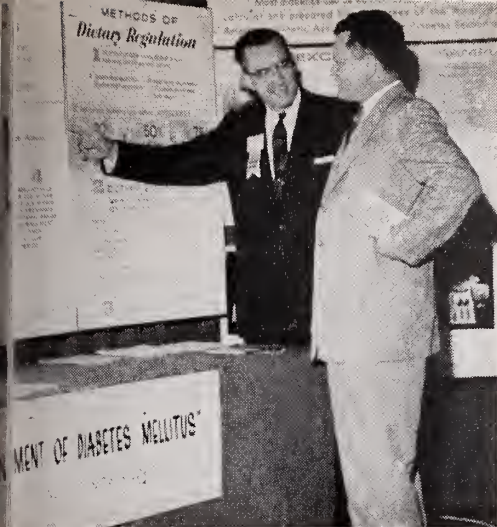


Figure 1: Chris J. McLoughlin (left) and C. Raymond Arp, (right) Atlanto, discuss the scientific exhibit on diabetes.

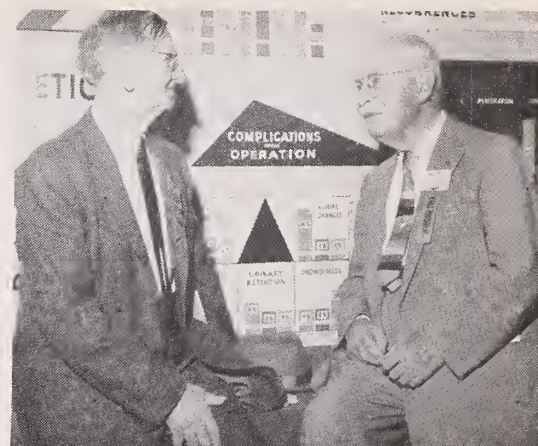


Figure 2: C. S. Jernigan, Sparto, (left) and W. R. Doncy, Savannah, (right) take time out for a chat between meetings. Dr. Jernigan was a delegate to the Annual Session, and Dr. Doncy is a Post President of the Association.

SCENES OF THE *104th ANNUAL SESSION

April 27-30, Macon, Georgia



Figure 3: Shot showing layout of the Mocon Auditorium. Commercial Exhibitors are in the foreground. Scientific Exhibits are in the center section. In the background a section meeting is being held.



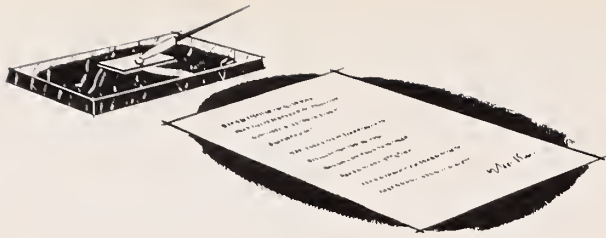
Figure 4: Fleming L. Jolley, Emory, (right) is shown talking over the exhibit, "Surgical Treatment of Hydrocephalus Using the Holter Valve (Spitz Procedure)," with Herbert S. Olmick of Mocon.



Figure 5: The MAG registration desk was kept busy during the Annual Session registering members and guests. Registration figures for the meeting totaled approximately 756, M.D.'s; 173, guests and exhibitors.



Figure 6: Murdock Eguen, Atlanto, and guest speaker James R. Maxfield, Dallas, Texas. Dr. Maxfield was the Eguen lecturer and spoke on the subject "The Use of Radioactive Isotopes in Medicine and Surgery."



abstracts by georgia authors

Dunn, Frederick L., C.D.C., U.S. Department of Health, Education and Welfare, Atlanta, Georgia, "Pandemic Influenza in 1957," *J.A.M.A.* 166:1140-1147 (Mar. 8)

The international spread of the new A Asian variant of influenza is described chronologically, country by country. The virus is followed as it moved from China in late February 1957 through eastern Asia, and thence to every inhabited portion of the world. The influenza pandemic, which was only the second in the twentieth century and the first in the period of virological research, was characterized by rapid global extension, high attack rates, and a conspicuous effect, though less so than in 1918, upon mortality rates.

World-wide spread of the pandemic required little more than six months, considerably less than in 1889 and 1918, probably reflecting the speed and extent of modern travel. Influenza epidemics appeared to develop rapidly when the virus introduced in equatorial regions, where seasons and seasonal living patterns change little. In those areas of the world where seasons are marked, epidemics, in general, developed only in the fall and winter seasons, reflecting not so much season *per se*, but changes of living patterns that go with seasonal changes. Thus the virus was introduced into North America in early summer, but widespread epidemics did not appear until fall with its retreat to a more crowded indoor existence and school openings.

McGarity, William C.; William D. Logan, Jr.; and Frederick W. Cooper, Jr., Emory University Medical School, Emory University, Georgia, "Peripheral Arterial Emboli," *Surg., Gynec. & Obst.* 106:399-408 (April) 58.

Embolism is the plugging of a vessel which occurs when a clot or foreign material, transported by the blood stream, becomes lodged at a point beyond which it cannot go because of its size or consistency. Emboli may obstruct a major vessel and cause distal gangrene unless collateral circulation is good or adequate flow can be reestablished in the affected vessel.

Arterial emboli may stem from several sources; however, the majority originate in a diseased left side of the heart.

The most frequent site of occurrence of arterial emboli is at the bifurcation

of the common femoral artery.

The site of obstruction, spasm of the major vessel and its collaterals, and distal and proximal thrombosis determine whether the blood supply to the extremity will be adequate.

Plain or paresthesia at the site of the lesion or distal to it, are the most frequent initial symptoms of arterial embolus. Color and temperature changes are noticeable very soon after arterial occlusion develops. The venous bed collapses. No pulses can be palpated distal to the site of complete arterial obstruction.

The best results in the treatment of arterial emboli is obtained when treatment is started within the first six to twelve hours following the occurrence of the embolus. Embolectomy appears to be the treatment of choice for emboli of the aorta, iliac and femoral vessels, provided the patient's condition permits carrying out this procedure. For emboli of the vessels of the upper extremity and of the popliteal vessels, the type of treatment to follow depends on the status of the collateral circulation, the presence of spasm, and resulting thrombosis.

Derrick, John R., University of Texas, Galveston, Texas; William D. Logan, Atlanta, Ga.; and John M. Howard, Philadelphia, Penn., "Pitfalls of Translumbar Aortography and Peripheral Arteriography," *Arch. Surg.* 76: 517-520 (April) 58.

The fear of arteriography and aortography was originally based upon the fear of puncturing the aorta or femoral artery, and secondly, upon fear of the ill affects of the radiopaque dye injected. A review of the reported complications associated with arteriography and aortography indicates that most fatalities have resulted from technical errors or poor clinical judgment. With proper selection of patients and strict adherence to the basic principals of technique, the procedure carries a minimal risk to the patient.

Renal complications appear to be associated with the injection of a high concentration of dye into the renal artery or repeating the test after only a short interval. The intestinal complications have resulted from the use of 80 per cent sodium iodide for the most part. The incidence of sensitivity to the dye is probably less than .0013 per cent.

Greenblatt, Robert B. and Edwin C. Jungck, Medical College of Georgia, Augusta, Georgia, "Delay of Menstruation with Norethindrone, An Orally Given Progestational Compound," *J.A.M.A.* 166:1461-1463 (March 22) 58.

Norethindrone (norethisterone), 17-alpha-ethinyl 19-nortestosterone, a new oral progestational compound, has been found to be an active orally given progesterone-like compound. In a daily oral dose of 20 to 30 mg., this compound will delay a normal menstrual period, even if treatment is begun seven days after ovulation. A dose of 20 to 30 mg. daily is sufficient to induce a pseudopregnancy of up to seven months' duration and longer.

The pseudopregnancy induced by norethindrone has been very beneficial in alleviating the symptoms of endometriosis as well as causing a regression of endometrial implants. Norethindrone also provides a dependable means of temporary delay of the menses for honeymoon, vacation, and athletic events.

In the dosage used (up to 30 mg. daily for seven months), no evidence of androgenicity has been found, nor did the substance prove estrogenic. Since norethindrone will delay menses when given after ovulation, it provides a convenient clinical end-point for a comparative assay of progestational compounds.

Lumpkin, Murray B.; William D. Logan; Cecil M. Couves; and John M. Howard, Emory University Medical School, Emory University, Georgia, "Artesiology as an Aid in the Diagnosis and Localization of Acute Arterial Injuries," *Ann. Surg.* 147:353-358 (March) 58.

Arteriography as an aid in the diagnosis of localization of obliterative peripheral vascular disease is well established. Because of the therapeutic urgency, this diagnostic adjunct has been overlooked in the evaluation of vascular trauma. The correlation of arterial injury with the presenting arteriogram has apparently not been previously investigated.

The need for a better method of diagnosing acute arterial injuries requires little justification. The distal pulse may be present; skin temperature normal, and external bleeding absent.

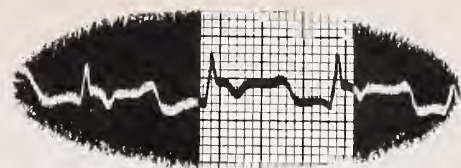
This has been a study of 22 patients with suspected arterial injuries. A definite correlation between the existing vascular defect and the presenting arteriogram has been made. Partial laceration, compression, vasospasm, and thrombosis were demonstrated. In several poor risk patients and patients with multiple injuries arterial exploration was avoided because of a normal arteriogram.

For accurate evaluation one must appreciate the basic principle of arteriographic interpretation; namely that contrast media will only delineate areas in which blood is in motion. No static hematoma nor stagnant column of intraluminal blood can be shown radiographically.

Arteriography is a reliable aid in the selection of patients who should be submitted to immediate arterial exploration.

COMPLICATIONS OF MYOCARDIAL INFARCTION

E. B. AGNOR, M.D., *Atlanta, Georgia*



heart page

WHILE ACUTE MYOCARDIAL infarction is always a serious condition, the prognosis of a given patient is largely determined by whether or not certain complications develop. The chief complications are shock, acute ventricular failure, congestive heart failure, arrhythmias, thromboembolism, rupture of the septum, and rupture of a papillary muscle. It is important to prevent complications when possible and to institute proper treatment when one does occur.

The use of standard measures of rest, relief of pain, and oxygen therapy may be considered as basal to treatment and the prevention of complications.

Shock may become one of the gravest complications of myocardial infarction. A shock-like state of mild to severe degree occurs in 50 per cent or more of all cases. If shock persists after the first hour or two, or develops later, it demands vigorous treatment. The most important recent development in the treatment of such shock is the use of vaso-constrictor agents. While several are available, the drug most widely used is nor-epinephrine (Levophed). When shock persists or the systolic blood pressure falls below 90 mm Hg., the agent is administered by continuous slow intravenous drip in amounts sufficient to maintain a systolic pressure of 100 mm Hg. or higher.

Acute left ventricular failure may accompany the onset of myocardial infarction, or appear within a few days. Failure of a milder and gradually developing type, is quite common during the early days after infarction. The clinical manifestations and treatment do not differ from those due to other forms of heart disease. There is no objection to the use of digitalis following myocardial infarction, and decompensation of all degrees is an indication for its use.

Cardiac irritability occurs in the course of myocardial infarction. Its most frequent manifestation is the appearance of premature beats. More serious manifestations such as auricular flutter or fibrillation and auricular or ventricular tachycardias may occur. Auriculoventricular block of any degree may be present, and the higher grades of partial block may be responsible for Adams-Stokes attacks. If the patient has a history of arrhythmia prior to infarction, or if premature beats are frequent,

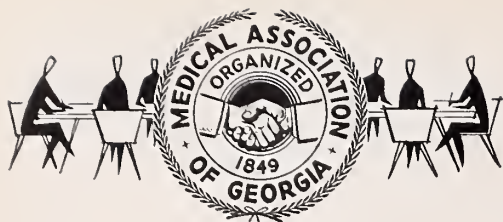
it is well to give procainamide hydrochloride (Pronestyl) or quinidine sulfate orally in periodic doses. The more serious arrhythmias are treated in conventional fashion. The most effective agent for the prevention of Adams-Stokes attacks is Isuprel given sublingually several times a day.

The frequency of thromboembolic complications following myocardial infarction, and the mortality rate, can be greatly reduced by the use of anticoagulants. It has been recommended that anticoagulants be used in all cases of myocardial infarction unless contraindicated by hepatic or renal insufficiency or a blood dyscrasia with hemorrhagic tendencies. Obviously, it is necessary to have available reliable measurements of the prothrombin time. In recent years there has been a tendency to feel that certain "good risk" cases may be exempt from anticoagulant therapy. However, the main problem is to be sure that "good risk" cases can be accurately designed.

The chief thromboembolic complications are emboli to the brain and peripheral arterial circulation from mural thrombi within the ventricle, local thrombus formation within peripheral vessels, and pulmonary embolism. These emboli usually arise from thrombi in the veins of the legs, unless mural thrombi are present in the right ventricle.

Approximately 10 per cent of deaths within the first two weeks following myocardial infarction are due to one of three complications. Rupture of the ventricle will usually result in sudden death, but in some instances in which the tear is minute, death may be delayed several hours. Continued physical activity on the part of the patient, and the persistence of hypertension after infarction appear to favor the occurrence of rupture. Hemopericardium without rupture has been observed. This is due to gross extravasation of blood through an area of pericarditis. It is more likely to occur in patients receiving anticoagulants. If pericardial effusion develops after infarction, the prompt use of anticoagulant neutralizing measures is indicated. Perforation of the interventricular septum and rupture of a papillary muscle are rare complications. The onset of either is usually marked by sudden dyspnea and the appearance of diagnostic murmurs.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.



the association

CALENDAR OF MEETINGS

<i>Society</i>	<i>Date</i>
<i>Chattoga County, Summerville,</i> Hugh Goodwin, Sec.	July 4
<i>Cherokee-Pickens, Home of T. J. Vansant,</i> Woodstock, E. A. Roper, Sec.	June 27
<i>Cobb County, Kennestone Hospital, Marietta,</i> H. S. Colquitt, Sec.	July 1
<i>Colquitt County, Moultrie, James T. Flynn, Sec.</i>	July 8
<i>Dougherty County, Phoebe Putney Hospital,</i> Albany, T. Gray Fountain, Sec.	June 26
<i>Emanuel County, Emanuel County Hospital,</i> Swainsboro, H. W. Smith, Sec.	July 1
<i>Fulton County, Academy of Medicine, Atlanta,</i> T. J. Anderson, Jr., Sec.	July 3
<i>Habersham County, Commercial Hotel,</i> Cornelia	July 3
<i>Jefferson County, Jefferson Hotel, Louisville,</i> John H. Pilcher, Sec.	July 9
<i>Laurens County, Dublin Country Club,</i> Dublin, John A. Bell, Jr., Sec.	June 26
<i>Mitchell County, Mitchell County Hospital,</i> Camilla, A. A. McNeil, Sec.	June 24
<i>Newton Rockdale, Newton Hospital,</i> Covington, J. W. Purcell, Jr., Sec.	July 15
<i>Peach Belt, Peach Co. Hospital, Fort Valley,</i> Wm. G. Talbert, Jr., Sec.	July 15
<i>Polk County, Brooks Cafe, Rockmart,</i> W. H. Blanchard, Sec.	July 15
<i>Richmond County, Old Medical College Bldg.,</i> Augusta, Theodore Everett, Sec.	June 24
<i>Spalding County, Elks Club, Griffin,</i> J. W. Watkins, Sec.	July 4
<i>Tri-County, Waynesboro Motel, Waynesboro .</i>	July 4
<i>Troup County, Highland Country Club,</i> LaGrange, J. R. Turner, Sec.	June 24
<i>Upson County, Upson County Hospital,</i> Thomaston, D. L. Head, Jr., Sec.	July 8
<i>Walker-Catoosa-Dade, Home of S. B. Kitchens,</i> Lafayette, E. M. Townsend, Sec.	June 24
<i>Ware County, Waycross, A. M. Knight, Jr., Sec.</i>	July 3
<i>Wayne County, Jesup, Albert R. Howard, Sec.</i>	July 14
<i>Wilkes County, Wolfe's Barbecue, Washington,</i> M. C. Adair, Sec.	July 15
<i>Whitfield County, Library, Hamilton Memorial</i> Hospital, Dalton, James A. Redfearn, Sec. .	July 16

ANNOUNCEMENTS

Comprehensive Review in Dermatologic Histopathology—September 8-12, 1958; New York University—Bellevue Medical Center Postgraduate Medical School. A complete review of both the normal histology of the skin and the essential histopathology of diseases of the skin. Under the direction of Dr. Marion B. Sulzberger. Maximum class of 20. Tuition \$85. For further details write Associate Dean, New York University Postgraduate Medical School, 550 First Avenue, New York 16, N.Y.

Southern Postgraduate Seminar—July 7-12; July 14-19; July 21-26, Saluda, North Carolina. Course is a postgraduate seminar in Internal Medicine, Obstetrics and Gynecology, and Pediatrics: the newest methods of diagnosis, prevention, and treatment. Lectures stress the solution of ordinary daily problems in the most modern, scientific, and satisfactory way. Lecturers are among the finest medical authorities in the South. Registration fee: \$35. AAGP Credit—35 hours per week. For complete information write M. A. Owings, Secretary-Treasurer, Southern Postgraduate Seminar, Saluda, N. C.

Second Oklahoma Colloquy on Advances in Medicine—November 12-15. Sponsored jointly by the Department of Medicine, University of Oklahoma, the Division of Postgraduate Education, Geigy Pharmaceuticals, Wyeth Laboratories, the Upjohn Company, Pfizer Laboratories, and Schering Corporation. Devoted to Arthritis and Related Disorders. Twelve nationally prominent investigators in their field will participate and present the results of original work from their laboratories. Registration open to all physicians. Further information may be obtained by writing the Division of Postgraduate Education, University of Oklahoma School of Medicine, Oklahoma City.

Arthritis and Rheumatism Foundation Awards—Pre-doctoral, postdoctoral, and senior investigatorship awards in the fundamental sciences related to arthritis for work beginning July 1, 1959. Deadline for applications is October 31, 1958. The program provides for three awards:

1. Predoctoral fellowships—limited to students who hold a bachelor degree. Stipends range from \$1,500 to \$3,000 per year.
2. Postdoctoral Fellowships—limited to applicants with the degree of Doctor of Medicine, Doctor of Philosophy, or of their equivalent. Stipends from \$4,000 to \$6,000.
3. Senior Investigator Awards—made to candidates holding or eligible for a "faculty rank." Stipends from \$6,000 to \$7,500. For further information address the Medical Director, Arthritis and Rheumatism Foundation, 10 Columbus Circle, New York 19, N. Y.

DEATHS

GEORGE T. BANKS, 79, of Fairmount, died April 26 following several years of ill health.

A native of Gilmer County, Dr. Banks received his

medical education at Chattanooga Medical College and began practicing medicine at Pine Log in 1910. A doctor for the L&N Railroad for 20 years, he moved to Fairmount in 1929. Dr. Banks retired from active practice in 1950.

Survivors include his wife; two daughters, Mrs. Hugh Hull, Salem Oregon, and Mrs. Sidney Connell, Clearwater, Florida; two sons, Herman Banks, Fairmount, and Mack W. Banks, Nashville.

HAL McCLUNEY DAVISON, Atlanta, died April 26, at the age of 67.

Dr. Davison was a well-known specialist in allergy and other fields of internal medicine. At the time of his death, he was the Immediate Past President of the Medical Association of Georgia.

A native of Woodville, Dr. Davison received his bachelor of arts and bachelor of pharmacy degrees from Mercer University. He completed his medical education at Atlanta Medical College, now Emory University, at the New York Postgraduate Hospital, and New York Hospital.

Dr. Davison was the former chief of medicine at Georgia Baptist Hospital. He was past president of the Fulton County Medical Society; President of the Fifth District Medical Society, the American College of Allergists, the American Therapeutic Society, the Southeastern Allergy Association, and the Academy of International Medicine.

He was a trustee of Mercer University, a member of the Atlanta Art Association, the American Legion, Military Order of World Wars, the Georgia Academy of Social Sciences, the Atlanta Civic Theater Group, the Active Voters' League, and the Atlanta Music Club. He was co-chairman of the Atlanta Council of Christians and Jews. Dr. Davison was a member of the Baptist Church, of the Piedmont Driving Club, and the Gyro Club of Atlanta.

Survivors include his wife, the former Natalia Beklemisheva of Russia; two sons, Capt. Peter Davison, U. S. Air Force, and Dr. Alexis Davison of Charlotte; and five grandchildren.

MONROE J. EPTING, 59, Savannah surgeon, died of a heart attack, May 8.

Dr. Epting received his AB degree from Newberry College in South Carolina and his medical degree from the University of Virginia. He served his internship at Bellevue Hospital and St. Luke's Hospital in New York.

During World War II, he served in the Pacific Theater as regimental surgeon with the Third Marine Division, Fleet Marine Force. For outstanding service he was awarded the Divisional Citation for service and the Bronze Star.

A member of St. Paul's Lutheran Church, Dr. Epting was church councilman for a number of years and chairman of the memorial committee. He was a member of Solomon's Lodge No. 1, F&AM, the Jesters, Scottish Rite Bodies, and the German Friendly Society.

He is survived by two sisters, two brothers, and a number of nieces and nephews.

CLAUDE GRIFFIN, Atlanta ear, eye, nose, and throat specialist died May 8.

Born in Templeton, Dr. Griffin was a graduate of Emory-at-Oxford and the Atlanta Medical College,

now Emory University. He interned at the New Rochelle Hospital and the French Hospital, New York.

Dr. Griffin was a member of the Fulton County Medical Society, the Medical Association of Georgia, and the American Medical Association. He was on the staffs of the Georgia Baptist and Piedmont Hospitals and formerly on the staffs of Emory Hospital and St. Joseph's Infirmary. He was a member of the Theta Kappa Psi medical fraternity and was a former president of its graduate chapter. He was a member of the Capital City Club.

Surviving are his wife; one son, Claude Griffin, Jr., Carrollton; one daughter, Miss Amanda Griffin, Atlanta; and two sisters.

JOHN CALVIN WEAVER, 79, Atlanta neurosurgeon, died April 20 after an extended illness. Dr. Weaver had retired several months ago after more than 52 years of active practice.

A native of Thomaston, Dr. Weaver graduated from Tulane University Medical School in New Orleans. He did postgraduate work at Johns Hopkins Hospital in Baltimore. Dr. Weaver later served as assistant professor of surgery, neurological division, Emory University. He was surgeon in charge of the U. S. Federal Penitentiary in Atlanta from 1911 to 1922.

An expert on medical history, Dr. Weaver wrote several volumes including, "One Hundred Years of Medicine in DeKalb County, 1822-1922," which he completed in 1953, and "Medical History of Georgia," which he recently completed.

He was a member of the Fulton County Medical Society, the Southeastern Surgical Congress, the Medical Association of Georgia, and the American Medical Association. He was a fellow in the American College of Surgeons and was a member of the New York Academy of Science.

Surviving are his wife, the former Mildred Morris of Carrollton, and two sisters, Mrs. Willis Sutton, Atlanta, and Mrs. M. A. Porter, New York.

SOCIETIES

William L. Paullin, F. Levering Neely, Carter Smith, and Joseph H. Hilsman presented a panel discussion on the problems of old age at a recent meeting of the FULTON COUNTY MEDICAL SOCIETY. On the same scientific program Lamar Crevasse delivered a paper on the subject of myxedema.

Francis Clifford Nesbit, Covington, has been elected President of the NEWTON-ROCKDALE COUNTY MEDICAL SOCIETY. He succeeds Goodwin G. Tuck of Covington.

Members of the STEPHENS COUNTY MEDICAL SOCIETY have elected the following officers for the coming year: Robert E. Shiflet, President; Arthur G. Singer, vice-president; Ralph H. Chaney, secretary; Henry McNeely and Irving D. Hellenga, delegates.

Principal speaker at a meeting of the WARE COUNTY MEDICAL SOCIETY was Russell Weige, radiologist from Augusta. Dr. Weige discussed the difference between inflammatory and cancerous conditions in the lung. At the same meeting, W. L. Pomeroy and Leo

SOCIETIES / continued

Smith reported on operational policies of Eugene Talmadge Memorial Hospital.

Four Columbus doctors participated in the scientific program of the May meeting of the **THIRD DISTRICT MEDICAL SOCIETY**. Bruce Newsome discussed radical surgery for cancer of the oral cavity. Simone Brocato reported on diagnosis of pericardial effusion. Harry Brill and Wray Tomlinson took part in a clinical pathological conference with the clinical discussion by Dr. Brill and a pathological presentation and discussion by Dr. Tomlinson. Also on the program was J. T. Galenbos of Emory University who spoke on newer concepts in the pathogenesis and therapy of ascites.

PERSONALS

Newly elected Georgia diplomates of the American Board of Orthopedic Surgery include **CHARLES FREEMAN**, Augusta; **ROBERT WELLS**, Atlanta; **GEORGE WHATLEY**, Columbus; **L. E. DICKEY**, Macon.

First District

W. D. LUNDQUIST, Savannah, was a member of a panel on "Continuous Health Programs" at a meeting of the Georgia Congress of Parents and Teachers.

J. W. PALMER, Ailey, has been named to serve as a member of the Board of Medical Examiners for another four year term. Dr. Palmer has been a member of the state board since 1910.

Second District

Six Moultrie physicians conducted a panel on the subject of tuberculosis at the annual meeting of the Colquitt County Tuberculosis Association. Members of the panel included **JASON L. MEADORS**, moderator, **P. D. CONGER**, **C. W. HARWELL**, **F. D. CHENEY**, **A. G. FUNDERBURKE**, and **JOHN P. TUCKER**.

Third District

ROBERT C. PENDERGRAST, Americus, delivered the Confederate Memorial Day address at exercises sponsored by the Cordele Chapter, United Daughters of the Confederacy.

C. MARION PUGH, Lumpkin, has moved his offices from the J. D. Singer Building to quarters recently provided in the Lumpkin City Hall.

Fourth District

E. D. WELLS, JR., LaGrange, has been elected to serve as president of the West Georgia Tuberculosis Association for the coming year.

Fifth District

Six Atlanta doctors attended the 54th annual meeting of the American Urological Association in New Orleans recently. **HAROLD P. McDONALD**, Atlanta urologist and President of the Fulton County Medical Society, was one of the guest speakers at the meeting. Dr. McDonald addressed the group on "Interstitial Cystitis in Children." **GORDAN G. ALLISON**, **REECE C. COLEMAN, JR.**, **HENRY D. HOLLIMAN, JR.**,

CHARLES REISER, and **CHARLES SCOTT, JR.**, were other Atlanta doctors attending the meeting.

JAMES F. HACKNEY, director of the Fulton County Health Department is the new president of the Georgia Public Health Association.

A. HAMBLIN LETTON, Atlanta, was honored recently by the Georgia Fellows of the International College of Surgeons. Dr. Letton was presented with a bronze plaque bearing the official seal of the College in appreciation for his outstanding service to the Georgia Chapter.

GUY V. RICE, Atlanta, director of Health Conservation Services for the Georgia Department of Public Health, was elected president of the Southern branch of the American Public Health Association at the 26th annual meeting of the group in Little Rock, Arkansas.

JOSEPH S. CRUISE, Atlanta, is the new president of the Atlanta Tuberculosis Association. Dr. Cruise was elected at the association's annual meeting.

Sixth District

CHARLES B. FULGHUM and **ZEB BURRELL**, Milledgeville, recently attended the annual meeting of the American College of Physicians.

Seventh District

ALFRED O. COLQUITT, JR., Marietta, has been named for a five-year term on the Marietta Housing Authority.

SARAH P. ORTON, Rome, was named "Pilot of the Year" at the annual dinner meeting of the Rome Pilot Club. Dr. Orton is past president of the local club.

FRED H. SIMONTON, Chickamauga, has been elected chairman of the Georgia State Board of Health for a two-year term. **JAMES M. BYNE, JR.**, was selected vice-chairman.

Eighth District

ARTHUR M. KNIGHT, JR., Waycross, recently attended the annual meeting of the American College of Physicians in Atlantic City.

VILDA SHUMAN, Waycross pediatrician, has been elected first lieutenant governor of the Georgia Pilot Clubs. Dr. Shuman was the 1955 winner of the Pilot Club's past presidents' cup for outstanding community and club service, and during the past year she served as district chairman of the club action committee.

Ninth District

The Georgia State Board of Health honored **R. LEE ROGERS** of Gainesville recently by the placing of his portrait in the board assembly room in Atlanta. Dr. Rogers was chairman of the Board for 18 years.

Tenth District

THOMAS FINDLEY, Augusta, has been made a regent of the American College of Physicians. This announcement was made at the college's 39th convention in Atlantic City, N. J.

VIRGENE S. WAMMOCK, Augusta, has recently opened offices in the Medical Arts Building for the practice of dermatology. Dr. Wammock is the former chief of the section of dermatology at Ft. Gordon.

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SERVICE WITH KNOWLEDGE

LEE HOWARD, SR., *Savannah*

DURING THIS GEOPHYSICAL year, with great emphasis being placed on science and chemistry, it seems fitting to abbreviate my remarks with these simple equations.

Ideas cannot be over emphasized as essential.

Ideals, if not activated, may be ineffectual idle dreams. The most inspiring address I can remember was given by President William Howard Taft to a graduating class at Annapolis. I still recall the focus of his talk which was "Aim High." While we should not keep our sight too high or have too many targets, it is essential to do plenty of firing and keep on the target.

The catalyst *Initiative* should be amplified to include incentive and hard work. The MAG objectives are many and vary in importance, but the most important ones have been well planned and are all in operation which should make easy going for your incoming president. This has been accomplished through years of coordinated work on the part of your officers and council. There is one venture, not at present well defined by any one of our committees, that I would like to initiate and promote. Though there might be quite a few who will disagree, I personally feel that the physician has attained a high place in the community. There may be a need for less politics in MAG, but I feel that there is a need for more physicians in politics on a local, state, and national level. This might remove some of the stigma from the profession of politics and politicians. To highlight a few objectives for the coming year, I will place great emphasis in the following order:

1. *Medical Education*—This is where the most time, thought, and money have been spent during the past two years. The present operational plan for the Talmadge Memorial Hospital and the Medical

School will quickly go into effect. The MAG "Art of the Practice of Medicine" courses being given at both medical schools have been well received, and this important objective should be expanded to include interns and residents.

2. *Institution-Physician Relations*—I'm pleased to admit being the "Daddy" of this committee. Good work has been planned and some accomplished, but much remains to be done.

3. *Insurance and Economics*—This committee has done a terrific amount of work and recently has achieved some of its objectives. They will need the help and support of the entire profession.

4. *MAG Building*—It is hoped that construction will start within the year.

5. *Our MAG Office and Journal*—They speak for themselves and need no amplification.

The catalyst component *Integrity* is last but not least in importance. Throughout my younger years, it was my feeling that the main essentials for success in the practice of medicine were good training, hard work, and a feeling of obligation to the patient. Of late, I have learned that integrity is more important than the other three ingredients—integrity being plain everyday honesty and regard for others.

Conclusion

My aims are high, and my slogan for the year is "Service with Knowledge." It is my ambition to help all the MAG membership and citizens in Georgia know more about MAG, its work, and its people. This can only be accomplished by getting together and intermingling. When in Atlanta please visit our office, and we will be visiting you more and more. My highest aim is to capitalize our organized efforts, so as to give the best possible medical services to all the people of Georgia.

BENULOSE - A NEW ADJUNCT IN THE TREATMENT OF FUNCTIONAL BOWEL DISTRESS

CHARLES W. HOCK, M.D., *Augusta*

FUNCTIONAL BOWEL DISTRESS is a definite syndrome characterized by a group of symptoms, including a disturbance of bowel function and certain physical findings. Although there are no specific, pathognomonic signs of gastrointestinal hyper-irritability, the syndrome can be distinguished from organic bowel disease. The most common symptoms of functional bowel distress are heartburn, belching, sour stomach, regurgitation, abdominal distention, soreness, pain, anorexia, flatus, diarrhea, constipation, alternating diarrhea and constipation, and mucus in the stools. It should be noted that symptoms of this type can also be associated with organic disease of the chest or gastrointestinal tract as well as with abdominal lesions outside the gastrointestinal tract. Physical examination is usually negative except for the fact that the sigmoid colon can frequently be palpated. It is usually tender to palpation; likewise, other parts of the gastrointestinal tract may be tender to palpation. Frequently, there is some associated bowel dysfunction, such as diarrhea, constipation, or alternating diarrhea and constipation. It is not uncommon for a patient to complain of passing stools which are ribbon-shaped or pencil-shaped. Although carcinoma of the rectum may be responsible for this complaint, its most common cause is simple spasm of the rectum. From the patient's history it is often evident that there has been excessive use of laxatives or a laxative-type diet for years.

The diagnosis of functional bowel distress is one which is *always* made by exclusion. Such a diagnosis should be made only after the patient has undergone a complete examination. This should include a medical history, complete physical examination,

complete blood count, urinalysis, stool examination for blood parasites, sigmoidoscopic examination, x-ray studies of the gastrointestinal tract and chest, gall bladder series, and barium enema. Other diagnostic procedures may be used if indicated. The diagnosis should *never* be made as a primary diagnosis and should always be made after ruling out organic disease.

The Test Compound

A new compound, Benulose*, has been proposed as an adjunct in the symptomatic treatment of functional bowel distress. The daily dose of 45 cc. contains a total of 45 mg. Bentyl,* nine gm. of a modified sodium carboxymethylcellulose, and 90 mg. sodium lauryl sulfate. It is administered in dosage of 15 cc. (one tablespoonful) three times daily. Theoretically, the amount of Bentyl present in the daily dose should be the amount needed to restore normal motility of the gastrointestinal tract without excessive inhibition or relaxation.^{1, 3} The modified sodium carboxymethylcellulose brings water into the lumen of the intestine and provides bulk, ensuring that the stool is neither liquid nor hard.^{4, 5} Sodium lauryl sulfate is a wetting agent which behaves much like dioctyl sodium sulfosuccinate, the fecal-softening properties of which are well-known.⁶ The combination should not be confused with laxative or anti-diarrheal preparations; rather, it should be considered as a new type of gastrointestinal medication designed to normalize the stool and bowel habit.

The Test Subjects

The new compound, Benulose, was administered to a group of 76 subjects, ranging in age from 23 to 76. In all but one, the clinical diagnosis was functional bowel distress. The other patient was a 39 year old female who suffered from ulcerative

*Benulose is the trade-mark of The Wm. S. Merrell Company, Cincinnati 15, Ohio for its combination of Bentyl with modified sodium carboxymethylcellulose and sodium lauryl sulfate; Bentyl is the trade-mark of The Wm. S. Merrell Company for its brand of dicyclomine.

colitis. She was included in the study because of the irregularity of her bowel habit which made her a suitable test subject. Of the 76 patients, 42 were 50 years of age or older. Functional bowel distress can and does occur at any stage, but it is common in older people. The syndrome can be considered as important in the practice of gastro-enterology, internal medicine, general practice, and especially in the new and increasingly important field of geriatrics.

Dosage

The usual dosage of Benulose was one tablespoonful three times daily, although in a few patients this was varied from one to two tablespoonfuls one to three times daily. The duration of therapy ranged from a few days to 245 days. The maximum total dosage given in this series was two tablespoonfuls three times a day for 219 days (19.7 liters).

Clinical Pharmacology

The effect of Benulose upon the stool and bowel habit was evaluated with respect to frequency of movement and character of stool.

Frequency data (Figure 1) were available on 75 of the 76 subjects. Of 50 patients who had been having irregular stools, the habit became regular in 40, remained irregular in eight, and was regulated to one to three movements daily in two following Benulose therapy. In nine subjects with reg-

ular movements before therapy, no change in the habit resulted from Benulose therapy. Of nine subjects who had had movements less often than once every 24 hours, there was no improvement in five, but three developed a regular bowel habit and one had more than three movements daily following treatment. Six patients had had more than three daily movements; of these, two developed a normal, regular habit, and the other four continued to have more than three movements. Only one patient had been having one to three daily movements before treatment, and in this case the habit became regular.

With respect to character of stool (Figure 2), the numbers add up to more than 76 (the total number of subjects), since some patients had more than one type of stool either before or after treatment with Benulose and, therefore, are considered more than once in the tabulation. Of these patients who had reported hard stools prior to therapy, 18 continued to have hard stools, 68 produced normally formed stools, 61 soft, and five liquid. Of those having soft stools before Benulose, two reported hard ones after treatment, 19 soft, 19 formed, and four liquid. Of those with occasional formed stools before treatment, 16 had hard stools following therapy, 61 soft, 69 formed, and seven liquid. Of those with liquid stools, two later developed hard ones, 12 soft, and 12 formed; the stool in six remained liquid. The majority of patients, therefore, developed both soft and

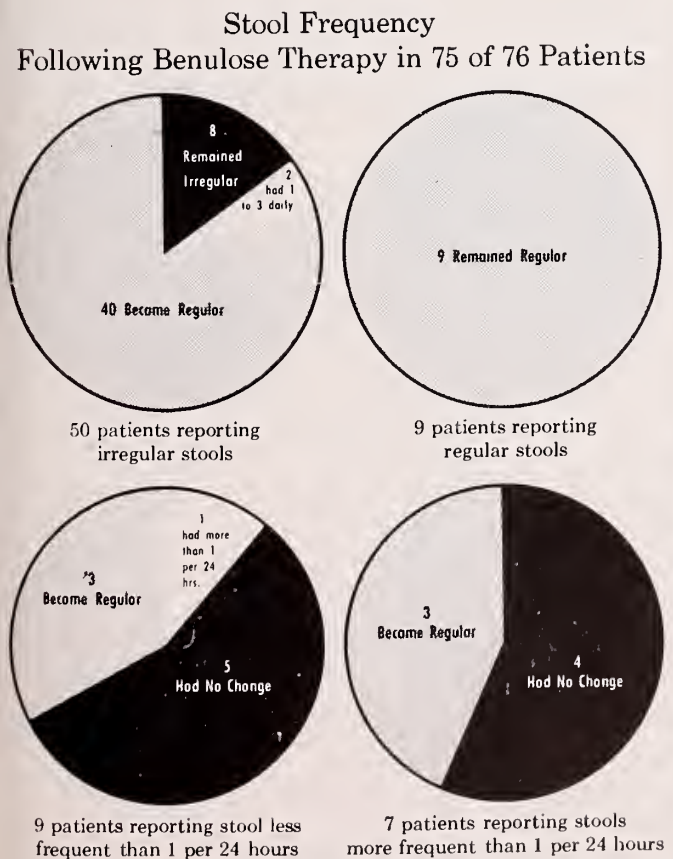


Figure 1

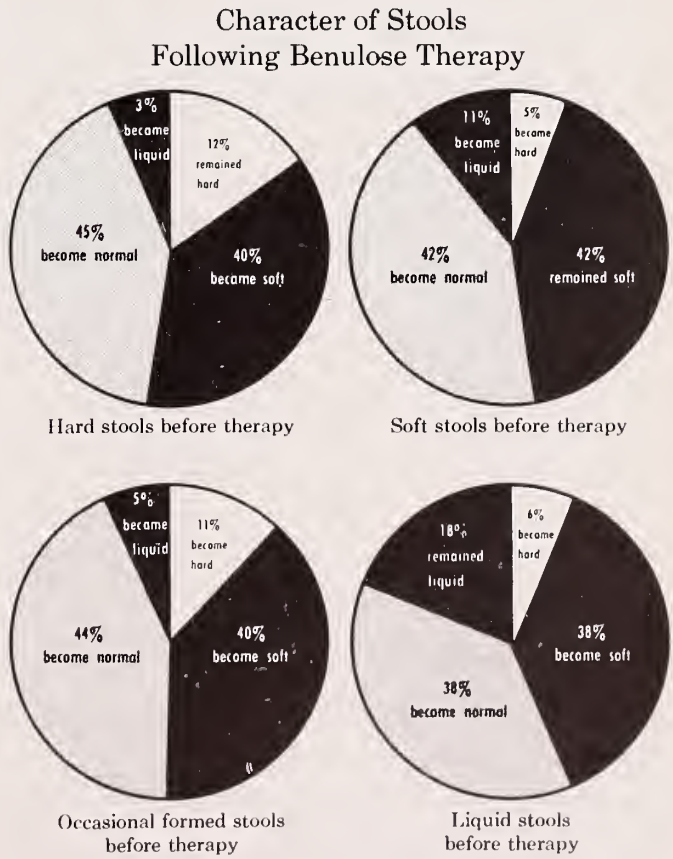


Figure 2

BENULOSE / Hock

formed stools on Benulose therapy, whether the character of the fecal evacuation before treatment had been usually hard, soft, formed, or liquid.

Clinical Evaluation

Disturbances in bowel habit and stool formation are common in functional bowel distress. Since Benulose commonly produces a relatively regular habit with a soft or formed stool, it would be expected that clinical improvement would be facilitated by the use of this new compound. Such, indeed, appears to be the case. Of the 76 patients who served as test subjects, 75 suffered from functional bowel distress. Of these, 54 were improved clinically and 13 were not helped. The remaining eight were not evaluated with respect to the course of their illness. The one patient who suffered from ulcerative colitis was improved with regard to regularity and softening of the previously hard fecal mass.

The side effects that were reported may have been due, in some cases, to the drug; in others, they may have represented therapeutic overactivity. There were reported six cases of nausea, three of diarrhea, two of abdominal pain, and one each of vomiting, vertigo, central stimulation, and blurred vision.

Concurrent Administration with Other Drugs

Benulose is formulated specifically as a normalizer for use in the treatment of functional bowel distress. It is not intended to be used as a vehicle for other medication. In the present study, it was frequently necessary to administer other drugs concurrently to patients who were taking Benulose. Despite the use

of a wide variety of such drugs, no instance of clinical incompatibility was encountered.

Summary and Conclusions

Benulose is a combination of Bentyl with a modified sodium carboxymethylcellulose and sodium lauryl sulfate, designed to normalize bowel action with respect both to frequency of bowel habit and character of stool. In dosage of 15 cc. (one tablespoonful) given by mouth three times daily it was found to be a useful adjunct in the treatment of 54 of a total of 75 patients suffering from functional bowel distress, and it was helpful in the one patient being treated for ulcerative colitis. Regularity was established in 40 (80 per cent) of 50 patients with irregular bowel habits. Benulose should not be confused with laxatives or antidiarrheal products; in the majority of cases, it produces soft or formed stools whether the stools prior to treatment were hard, soft, fomed, or liquid.

1467 Harper St.

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Jason Lawrence Meadors	Vereen Memorial Hosp., Moultrie	Active	Colquitt
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Herbert L. Weininger	265 Ivy Street, N.E., Atlanta	Active	Fulton
Robert H. Wise	Doctors Building, Pendleton Drive, Valdosta	Active	South Georgia

ATYPICAL MYOCARDIAL INFARCTION

WARREN D. STRIBLING, M.D., *Gainesville*
and R. BRUCE LOGUE, M.D., *Emory University*

THE USUAL PATIENT with coronary artery disease gives a characteristic clinical story and presents no problem in diagnosis. There is a group, however, in whom the clinical findings are atypical and the diagnosis is not readily apparent. More awareness of this latter group will lead to earlier diagnosis and more effective treatment. The following case summaries represent unusual manifestations of acute myocardial infarction.

Case One: Unusual Location of Pain

Mr. K., a 40 year old school teacher, noticed a throbbing, aching, localized pain at the angle of the left jaw. This increased in severity over a 24 hour period and thinking he had an abscessed tooth, he consulted his dentist. A careful oral examination and x-ray were negative for dental pathology. The pain continued and eventually anterior chest discomfort developed. The patient then consulted his physician who suspected a myocardial infarction which was confirmed by the electrocardiogram.

Pain in the jaw is a frequent manifestation of coronary artery disease. It is not commonly recognized, however, that the pain may occur solely in the jaw without a substernal component. This jaw pain may occur on one or both sides and at times is present in the maxilla. It is not infrequently localized in the temporomandibular joint or in one tooth. Extractions may appear to be indicated and indeed performed. When jaw pain is unusual in severity and no local cause can be found, myocardial infarction should be suspected.

Case Two: Painless Myocardial Infarction

Mr. C., a 50 year old contractor with known arteriosclerotic heart disease and an old myocardial infarction, was admitted with a three day history of orthopnea, paroxysmal nocturnal dyspnea, and dyspnea on exertion. There was no history of chest discomfort of any type. The electrocardiogram on admission showed changes of an acute antero-septal myocardial infarction.

Herrick¹ was the first to emphasize that myocardial infarction occasionally occurs without pain. Parkinson and Bedford² stated that "When infarction supervenes in a case with pre-existing signs and symptoms of heart failure, the clinical picture may be less distinctive. Pain is not a prominent symptom; it is either absent or quite overshadowed by dyspnea. A sudden exacerbation of the signs of failure may be the only evidence of cardiac infarction." In the above case, it is likely that the myocardial infarction precipitated the acute left ventricular failure. Under these circumstances dyspnea may be so severe as to mask pain. In many cases, there is no pain and no confusing factor such as heart failure. This group represents the true "painless infarction." The exact reason for this is not clear but it has been postulated by Keefer and Resnik³ that the infarction may proceed slowly with a few muscle fibers being destroyed at a time. By this mechanism the resulting sensation is insufficient to reach the sensorium and produce a sensation of pain. Herrick⁴ believed that gradual progressive occlusion of a coronary artery may lead to the destruction of nerves, blood vessels, etc., and thereby produce no painful sensation. The exact incidence of painless myocardial infarction is debated. The report incidence ranges from as low as one per cent⁵ to as high as 38 per cent.

Case Three: Myocardial Infarction Occurring Under Anesthesia or in the Immediate Post-operative Period

Mr. M., a 69 year old machinist, developed severe periumbilical pain with radiation to the back and into the left testicle. This pain forced him to seek medical advice, and a rapidly expanding arteriosclerotic abdominal aortic aneurysm was found. There was no history of hypertension, angina, congestive heart failure, or previous myocardial infarction. The aneurysm was resected and a nylon graft inserted. The patient tolerated the

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surgery well. Approximately twelve hours post-operatively, shock developed and an electrocardiogram revealed changes compatible with a recent myocardial infarction. The patient denied chest discomfort of any type.

Less than half of the patients with myocardial infarction occurring under anesthesia or in the immediate post-operative period have typical histories. Many have no symptoms and are diagnosed only if routine pre- and post-operative electrocardiograms are taken. One should be suspicious when there is hypotension, dyspnea, cyanosis, congestive heart failure, unexplained fever, or when cardiac arrhythmias occur. Wroblewski² has emphasized the lack of cardiac symptoms pre-operatively. In his series, 60 per cent of the infarctions occurred within a three day period with an overall mortality of 40 per cent. Only 27 per cent had chest pain as compared to the general incidence of 97 per cent. Surgical shock, tachycardia, arrhythmias, blood volume alterations, and changes in blood coagulability may be etiologic factors. Many myocardial infarctions are overlooked in the post-operative period because of the frequency with which analgesics and sedatives are given. Under these conditions, pain may be obscured or attributed to the usual discomforts which follow surgery.

Case Four: Myocardial Infarction Presenting with Arterial Emboli

Mrs. S., a 41 year old known diabetic, suddenly developed numbness, weakness and severe pain in the right leg. Three weeks before onset she complained of a "pressure sensation" in the anterior chest accompanied by occasional nausea and weakness. Physical examination revealed a cold, cyanotic, pulseless right leg. The murmur of aortic stenosis was heard. The electrocardiogram revealed a sinus rhythm and changes of an acute myocardial infarction. At operation an embolus was removed from the right femoral artery just below the inguinal ligament.

The source of the embolus in the above patient was an unrecognized myocardial infarction occurring three weeks prior to admission. Arterial emboli are thought to arise either from clots in the auricle in patients with auricular fibrillation or from mural thrombi secondary to myocardial infarction. Bacterial endocarditis and thrombosis at the site of an arteriosclerotic plaque are additional causes of acute arterial obstruction. Patients presenting with arterial emboli must be carefully scrutinized and every effort made to rule out mural thrombi in the left ventricle secondary to myocardial infarction.

Case Five: Myocardial Infarction Occurring in Patients with Convulsive Seizures

Mrs. S., a 66 year old white female, was admitted with continuous Jacksonian convulsive seiz-

ures of four hours duration. Cerebral vascular accident or neoplasm was the admission diagnosis and the patient was prepared for ventriculography. Pre-operative electrocardiogram revealed an acute antero-septal myocardial infarction. There was no history of chest discomfort.

Patients with cardiac disease such as aortic stenosis, cardiac arrhythmia, myocardial infarction and Stokes-Adams syndrome may present with convulsive seizures. On the other hand, patients with convulsive disorders may experience myocardial infarction during a seizure as occurred in the above patient. Myocardial infarction occurring in a patient with convulsions should be suspected when there is hypotension, chest pain, congestive heart failure, or when cardiac arrhythmias occur.

Case Six: Myocardial Infarction Presenting with Fever and Bizarre Symptoms

Dr. R., a 61 year old professor was admitted with a one week history of fever, chills, and generalized aching. He denied chest discomfort until the day of admission when he developed a dull aching pain in the substernal region. On admission, a grade four systolic murmur with a thrill was heard over the precordium. A diagnosis of acute massive postero-lateral myocardial infarction with rupture of the interventricular septum was made. The patient died within 48 hours and post-mortem findings confirmed the clinical impression. The infarction was estimated to be seven to 10 days old by the pathologist.

Myocardial infarction must be added to the long list of diseases to be considered in the patient with unexplained fever. It is quite likely that the above patient's "flu-like" illness was due to myocardial infarction. Fever following myocardial infarction may be due to necrosis of heart muscle, or complicating factors such as pneumonia, urinary tract infection, pulmonary infarction, or drug sensitivity. Many times premonitory symptoms such as weakness, dizziness, and palpitation occur prior to the onset of pain or chest discomfort. In many elderly individuals mental confusion, vertigo, loss of memory or even coma may mask the clinical picture.

Case Seven: Myocardial Infarction in the Diabetic Patient

Dr. R., a 74 year old minister with known angina pectoris and diabetes was admitted to the hospital in insulin shock. He was given 50 cc. of 50 per cent glucose intravenously and shortly afterwards was completely oriented. An electrocardiogram revealed changes of an acute posterior myocardial infarction. He denied chest discomfort and recovery was uneventful.

The common occurrence of coronary artery disease in the diabetic patient is well known. Angina pectoris or myocardial infarction may be precipi-

tated by hypoglycemic attacks as in the above patient. Such episodes of hypoglycemia should be avoided in all diabetics but especially in those with known coronary artery disease.⁸ It should also be pointed out that myocardial infarction may supervene in the diabetic patient in acidosis without the usual clinical symptoms. Myocardial infarction should be suspected in patients who recover slowly from diabetic acidosis or in those who develop shock, heart failure, cardiac arrhythmias, etc. Here again the use of the electrocardiogram is helpful in the early recognition of such problems.

Case Eight: Myocardial Infarction in the Psychotic Patient

Mr. M., a 76 year old white male with known arteriosclerotic heart disease and two previous myocardial infarctions, was admitted with a psychosis thought to be on the basis of cerebral arteriosclerosis. It was impossible to obtain a good history on admission. Electrocardiogram showed T wave changes consistent with the ischemic effect of a recent coronary thrombosis. His course was complicated by bouts with ventricular tachycardia which responded to intravenous procaine amide and magnesium sulphate. The psychosis gradually improved, and he was discharged.

Psychotic patients frequently have myocardial infarctions and do not complain of pain. This is not synonymous with saying that these infarctions occur without symptoms, for many such patients complain of dyspnea, nausea, vomiting, weakness, etc. Many times a change in psychotic behavior and congestive heart failure are the only indications that such patients are in difficulty. Marchand⁹ reported that when cases of sudden death were excluded, 67.5 per cent of his psychotic patients had no pain. It was his opinion that these patients lose the meaning of pain and are non-responsive to painful processes.

Case Nine: Myocardial Infarction Presenting with Angina Pectoris

Mr. M., a 60 year old white male gave a history of pain in the right pectoral region on exertion promptly relieved by rest. Careful questioning failed to reveal a history of prolonged chest discomfort of any type. An electrocardiogram showed definite changes of an old postero-lateral myocardial infarction.

It is not widely appreciated that myocardial infarction may occur without prolonged chest discomfort. Many patients give a history of pain only with effort, and deny prolonged pain, yet the electrocardiogram, and other studies, may reveal the changes of myocardial infarction. Indeed recent studies of Snow¹⁰ indicate that most patients who develop angina pectoris for the first time have coronary occlusion with pathological evidence of myocardial infarction.

Summary

The usual patient with coronary artery disease gives a characteristic story and presents no problem in diagnosis. The purpose of the above case presentations is to illustrate nine different circumstances in which one should be suspicious of myocardial infarction. Serial electrocardiograms, as well as other clinical clues, are very useful in such instances and often shed considerable light on seemingly difficult situations.

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A.M.E.F. CONTRIBUTORS

Brown, Charles T.	Guyton
Cale, Mrs. J.	LaGrange
Chambers, Mrs. J.	LaGrange
Dane, Mrs. George	Metter
Daniel, Mrs. J.	Savannah
Davis, Floyd E.	Waycross
Habersham County Medical Society .	Clarkesville
Harper, Sage	Douglas
Hogan, Jasper T., Jr.	Macon
Jarrell, Mrs. F.	Columbus
Keller, A. P., Jr.	Athens
Lanford, Charles A.	Macon
Leigh, Ted F.	Atlanta

Looper, Ben K.	Canton
McPherson, Mrs. T.	Atlanta
Nicholson, Mrs. G.	Cornelia
Poer, Mrs. D. H.	Atlanta
Pomeroy, W. L.	Waycross
Rhode, Mrs. C. M.	Augusta
Rosen, Samuel F.	Savannah
Rottersman, William	Atlanta
Simmons, Mrs. W. E.	Metter
Stoner, Cyrus M.	Atlanta
Thompson, Mrs. N.	Elberton
Vaughan, Victor C., III	Augusta
Walker, Mrs. J.	Atlanta

SUPPRESSION OF LACTATION AND ITS RELATION TO CANCER OF THE BREAST

ALFRED G. KING, M.D., *Decatur, Georgia*

MANY ARTICLES HAVE been written for both medical and lay publications concerning the importance of the early detection of cancer, and these are certainly commendable. However, one may read very little about known methods of preventing the development of malignant growth, chiefly because there is not enough evidence to prove them in most instances. One notable exception to this has been the recent intermittent flow of papers on the relationship of cigarette smoking to cancer of the lung, many of which have been widely publicized in the newspapers. Certainly, if this is justifiable, it is equally important to point out to the public those statistical facts about malignancies in the other regions of the body which might be preventable; and there is one outstanding example, carcinoma of the breast.

In 1956 Pascua,¹ in the *Bulletin of the World Health Organization*, published a review of the mortality statistics in cancer of the breast and female genital organs received from 19 countries scattered over the world, which covered a period of 33 years. Complete tables are presented which give the age incidence, morbidity, and mortality rates for each country surveyed; and these show that the frequency of cancer of the breast in women has increased 50 per cent in the United States and England during the period studied, and 100 per cent in some European countries. One might argue that these figures are due to some extent to more accurate diagnosis and recording of statistics in recent years, but they certainly indicate that there is a rapidly increasing number of women developing the disease; and there must be a reason for it besides longevity. Figures compiled by the N. Y. State Cancer Registry² predict

that four out of every hundred women in that state will have cancer of the breast during their lifetime, and this is a disturbingly high incidence.

Pascua's studies show that in Finland, Italy, Chile, and Japan not only is the incidence rate very low, with respect to the female population; but there has been very little increase in frequency in these countries. Cancer of the breast is also known to be rare among the African natives, and peoples of low social economic levels; and it has long been supposed that the reason was that they had large families and nursed their babies. Similarly it has been shown by many investigators that in those more civilized countries where it is still the custom for women to nurse their babies, the incidence of breast cancer is very low. At the meeting of the Fifth International Congress on Geographical Pathology in 1954, it was concluded that breast feeding must be considered as a possible protective factor in the low morbidity and mortality rate among the Japanese.³ In contrast to this, Haagensen, in analyzing his series of breast cancer, found that almost 30 per cent of his patients who had any children had not nursed them. This figure, he states, is twice as high as that found in Lane-Clayton's cases analyzed in England 25 years ago and is due to the fact that, in modern times, deterred by both obstetricians and pediatricians, very few women nurse their babies. Haagensen concludes that, "This simple fact may be of fundamental importance in the modern high frequency of mammary carcinoma."

In 1942, Ian McDonald⁴ made a survey of 2,636 cases of mammary cancer compiled by the American College of Surgeons tumor registry; of these he

found satisfactory information about lactation in 104 cases; in 42 per cent the breasts failed to lactate. His conclusion was, "It is entirely possible that the steady increase in carcinoma of the breast in "civilized women" is in large measure due to complete or partial failure of lactation."

If indeed the doctors who have pregnant women and new born babies under their care are aware of this, it would seem most important that they stress the desirability of breast feeding and make every effort during pregnancy to prepare mothers for that function. In addition to the evidence that the functional breast is less prone to develop cancer, every authority on infant feeding stresses the benefits derived from human milk when compared to artificial formulae. Every medical student has memorized the tables of food values and knows the superiority of breast feeding; yet when he goes into practice, he either forgets about it or is in too much of a hurry to adequately explain its advantages to his patients.

There is, however, another reason why the modern mother fails to nurse her babies as she was intended by nature, and that is her personal resistance to the idea. In the first place she has many misconceptions about the effect of nursing on her breasts. Many women think that it will make them large and pendulous and disfigure their appearance, while as a matter of fact, it tends to encourage normal support of breast tissue and retain its firmness by preventing premature atrophy. Also many prospective mothers fear the cracked nipples and infections that they have heard about from other women. Both of these complications can be prevented by the proper care of the nipples during pregnancy and after delivery, if the patient is instructed by her obstetrician. Another reason for the aversion of women to breast feeding is that they know of relatives and friends who have tried it and had to give up after a few days because of discomfort and pain, due to fullness; or contrariwise, have not had enough milk. These conditions are due, in most instances, to improper instruction of the mother by doctor and nurse and not to any inherent physiological deficiency of the patient. It is true, however, that proper instruction by both doctor and nurse is becoming a lost art, because so few mothers desire to nurse their babies. The Russians have jokingly called the U. S., a nation of "milkless women."

There is a third primary reason for the diminishing incidence of breast fed babies, and perhaps it is the most significant of all. Mothers do not want to be tied down to a four-hour schedule; either it interferes with their social activities or they have to return to work for economic reasons as soon as they recover from their pregnancy. These are philosophi-

cal implications of the breakdown of normal family life in our advanced state of civilization, which perhaps in itself is a fundamental reason for the increasing frequency of cancer in all the female genital organs. However, if women were aware of the possible dangers that they face because of their interference with natural functions, it is possible that a change of attitude might be effected with great benefit to them and to society.

It is not truly within the scope of this paper to present all the evidence of the relationship of hormone imbalance to the development of cancer of the breast; an excellent summary may be found in Haagensen's "Diseases of the Breast" published in 1956, and this book should be read by every doctor who treats female patients. Many investigators have tried to produce breast cancer experimentally in animals by giving large doses of natural and synthetic estrogens over a long period of time; and in fact, some of them have succeeded. In spite of this, the question of whether or not estrogens induce carcinoma of the breast in the human remains controversial. There are, however, reports of cases with a history of long continued use of estrogens in which cancer was accompanied by epithelial proliferation typical of the estrogen effect found in the experimental animal. It would seem that the production of epithelial changes in the breast of both animals and humans may be a question of dosage.

Now the female begins the production of ovarian estrogens even before birth, and she continues to accelerate their development with a peak concentration during the child bearing period, diminishing with advancing age thereafter. Consequently, there is a continual ovarian hormonal stimulation of the breasts over a long period of years unless it is suppressed by pregnancy and lactation. Many studies have shown that there is a definite relationship of parity to the incidence of carcinoma of the breast: it is not necessary to detail them here. It is an accepted fact that the more children borne, the less chance of having a breast cancer. This has been proved by numerous investigations.^{5, 6} Here is where birth rate enters into the picture. The average U. S. family has less than three children. This means that the average American woman, if indeed she has any children, suppresses her ovarian function for less than 27 months out of her life expectancy of 68 years, unless she nurses her babies, when another 15-18 months may be added. These extra months may prove an important factor. The size of the modern family may be limited by social and economic necessity (although there are cogent practical, as well as philosophical, arguments against this kind of reasoning), but there is no reason why women cannot breast-feed the children they bear,

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with proper pre-natal preparation and post partum instructions. It would seem logical that they would, if they were aware of the fact that they could thereby diminish their chances of developing cancer of the breast in later life. It would also seem logical that it should be the duty of every obstetrician and pediatrician to encourage breast feeding, not only by mentioning the advantages to the mother, but by seeing it through with patience and understanding.

This presentation is not intended to be an argument that hormones are the sole cause of cancer of the breast. There are other factors such as hereditary predisposition and perhaps others of which we as yet have no knowledge. The intention is to point up the fact that we may have a preventive attack on carcinoma of the breast which is being neglected, with all the emphasis being placed on early detection and definitive management of the already present disease.

Summary

Based on available world wide statistical information, an argument is presented that breast feeding may be a possible preventive measure in the development of carcinoma of the breast. Reasons why the modern mother does not nurse her babies are given. A plea is made to obstetricians and pediatricians to encourage normal lactation.

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THE GROWTH AND RESULTS OF AN ALCOHOLIC OUTPATIENT CLINIC

ELLISON R. COOK, III, (*Medical Director, Chatham Clinic, Savannah,*
Operated by Georgia Commission on Alcoholism)

It is exciting and rewarding to experience the fruition of a dream and the broadening of human understanding. At the Chatham Clinic, we have enjoyed genuine concern for personal problems ripening into mutual respect. Whatever our patients may have gained in objective appreciation, our staff has prospered more in regard and respect for the individual soul and in personal humility. The entire community has benefitted not only in the rehabilitation of worthwhile people, but even more in the acceptance of an attitude of unselfish tolerance. In elucidating our problems, we have shown that people all have difficulties of adjustment, and that naming the problem is always the first step to solution. Our methods and attitudes are leading the way to new ways to approach problems other than the one to which we address ourselves. We have obtained community confidence and respect in a very short time. This, for a problem sometimes considered immoral, unwise, unhealthy, or worse, bespeaks not only the dedicated services of staff and patients, but a general social attitude of unexpressed hunger for help. We are being more appreciated than scorned, and we are being sought after for advice rather than being used as a repository for unwanted prob-

lems. There seems to be a sense of missionary zeal about us all, and this, of course, is the secret of our success. We are constantly evaluating and discovering, fulfilling the definition of true medical research, and feel that we are approaching some answers.

We have been surprised about some things, disappointed about others, and pleased about many. Since resistance on the part of a prospective patient would be generally anticipated, it was unexpected to find that most alcoholics are so anxious for help that only shyness or lack of humility or censoriousness keeps them away. An important lesson was to learn not to assess blame in any degree on anybody, but to evaluate the person and his problem independently and objectively. Along the same line, we find that our function is not to give advice, but to add up the score. Most people respond to this kind of treatment.

A business of this kind rather invites disappointment, and we tend to magnify these because they mean so much to the people concerned. However, the pleasures of reviving hope and occasional rehabilitation and frequent reconciliation make it all worth while.

THERAPEUTIC CONFERENCE: ATRIAL TACHYCARDIA

STAFF OF THE MEDICAL COLLEGE OF GEORGIA, *Augusta*

MODERATOR: THE PATIENT will be presented by Dr. Abels.

Dr. Abels: The patient for discussion this morning is J. K., a 26 year old colored female, who was admitted to this hospital on January 16, 1958. The referring diagnosis was congestive heart failure. This patient had no history of cardiac disease prior to a pregnancy six years before. Her pregnancy was complicated by pedal edema, but it is not known whether she had hypertension or albuminuria. She required several transfusions at delivery for excessive blood loss but did well otherwise until one month later when she developed congestive heart failure. She was treated with digitalis and mercurials for approximately one year with good results.

After one year she discontinued the therapy on her own and remained asymptomatic for a period of four years. During this time she had two pregnancies which resulted in miscarriages at two and three months respectively. She became pregnant again and carried to term, having a normal delivery four months prior to this hospital admission. She did well again until one month following this pregnancy when she had the onset of congestive failure. Although treated with digitalis and diuretics it was progressive, and ten days prior to admission here she was admitted elsewhere with anasarca. Approximately one month prior to admission here she began having dysphagia and stated that food seemed to "hang up" in the middle of her chest. Her treatment at the other hospital was evidently successful because when admitted here she had no pulmonary congestion or peripheral edema.

She has no history of severe fevers in childhood, scarlet fever, strep throat, polyarthritis, chorea, or any unusual diseases. She did give a history of hav-

ing tonsillitis on several occasions. Review of systems and family history are negative except that both parents died in their forties of some cardiac disease.

The physical examination showed a pulse of 130, respirations of 22, and a blood pressure of 122/100 with a normal temperature. She was a well developed, thin, colored female appearing acutely and chronically ill with profuse diaphoresis and orthopnea noted. The peripheral pulses were noted to be rather weak but no peripheral edema was noted. There was no adenopathy or skin lesions. The head and neck examination was negative. The chest was free of rales and rhonchi.

The heart was noted to be huge with a diffused PMI extending from the posterior axillary line to the anterior axillary line on the left. A definite precordial bulge was evident and a grade II blowing systolic murmur was heard at the primary and secondary aortic area. A high pitched grade III-IV systolic murmur was heard at the apex and axilla; and a grade II mid-diastolic murmur was heard at the apex. P-2 was greater than A-2. The rhythm was irregular but not completely so. The liver was enlarged to the anterior superior iliac spine and was firm, moderately tender, and not pulsatile. The remainder of the physical examination was not considered abnormal. The admitting impression was congestive heart failure probably secondary to combined mitral disease, with rheumatic heart disease activity to be determined.

Repeated blood counts have all been within normal limits, and all but one of several erythrocyte sedimentation rates have been elevated. Initial C-reactive protein was 3+, but subsequent determinations have been negative. ASO titers have been well within normal limits. Serum electrophoresis and protein determinations showed an elevation in the gamma globulin fraction with a slight decrease in the albumin. FBS, NPN, urinalysis, serology, PBI, cholesterol, radioactive-iodine uptake and several other tests have been within normal limits. On admission, electrolytes were normal, but subsequent determina-

Therapeutic Conference is a weekly presentation of the Departments of Pharmacology, Medicine, Surgery, and Pediatrics. This article is an edited verbatim transcription of a conference presented on March 17, 1958. The participants were: R. P. Ahlquist, Ph.D., Professor and Chairman of Pharmacology, Moderator; Thomas P. Findley, Jr., M.D., Professor and Chairman of Medicine; Harry T. Harper, Jr., M.D., Clinical Professor of Medicine; A. Calhoun Witham, M.D., Assistant Professor of Medicine; Gene H. Abels, M.D., Intern in Medicine; G. L. Echols, Jr., Third Year Medical Student.

TACHCARDIA / Medical College of Ga.

tions of the electrolytes showed a mild hyponatremia. A Papanicolaou smear was noted to be class two. The admission EKG was interpreted as showing biventricular hypertrophy and atrial tachycardia with AV block varying from 2:1 to 4:1, the 2:1 block being the predominant rhythm.

A chest X-ray showed a markedly enlarged heart with congestive changes in the lungs. The enlargement was thought compatible with either pericardial effusion or with enlargement of all chambers. Subsequent X-rays of the chest were unchanged. Cardiac fluoroscopy, however, showed marked biventricular hypertrophy with calcium in the mitral valve and a giant left atrium.

The patient's course in the hospital has been uneventful except for the times when she was receiving drugs to convert her rhythm. She had a persistent atrial tachycardia with 2:1 AV block while not on digitalis. On one occasion she was given hydroxyzine (Atarax) with the hope that this might convert her arrhythmia but this was unsuccessful after four days. She was given an acetyl strophanthidin test on January 31, after being off digitalis for approximately two weeks. This test was interpreted as indicating that she was still very sensitive to digitalis. She was then given quinidine in an effort to break her atrial tachycardia but without success. It did slow her atrial rate to a small degree but would then convert her to a 1:1 rhythm with a ventricular rate of 200 and she would go into shock. Chloroquine did the same thing. Quinidine was again given after having the patient fully digitalized. We didn't carry her this time to the 1:1 rhythm but she did go down to a 2:1 block from a basic 4:1 rhythm. She was then started on prednisone, 10 mg. q.i.d., on the supposition that part of her disease might be due to an active myocarditis. This has caused a moon face but has otherwise not changed her picture at all. On February 20, she was given disodium versenate, 600 mg. I.V., over a period of one half hour in an attempt to see if this would normalize her rhythm in case she were in digitalis intoxication. This produced no change at all in her electrocardiogram. Two days ago she was given procainamide (Pronestyl) in an attempt to break her tachycardia. This was given up to 3.5 grams orally in a period of five hours without effect other than causing some decrease in her AV block.

Moderator: Are there any questions at this time?

Dr. Findley: The diagnosis is what?

Dr. Abels: The diagnosis as it stands now is mitral stenosis and insufficiency with calcium in the mitral valve on the basis of rheumatic heart disease.

Moderator: There are a number of different points to be discussed. First, those that have to do with the

drugs that were used, and second, we must consider the arrhythmias that were present either due to the disease or induced by the drug therapy. Since we are going to talk about digitalis, to keep things clear, the word digitalis refers to any substance that has an action on the heart similar to that produced by digitalis leaf unless we otherwise specify what particular substance we are talking about. Perhaps at this time Dr. Witham can demonstrate some of the arrhythmias present in this patient.

Dr. Witham: I have prepared two slides that show part of this patient's course in the hospital. *Figure 1* is one of the early tracings, at about time of admission. You notice in Lead I the more or less totally irregular ventricular response which I think accounts for the initial impression that she was fibrillating.

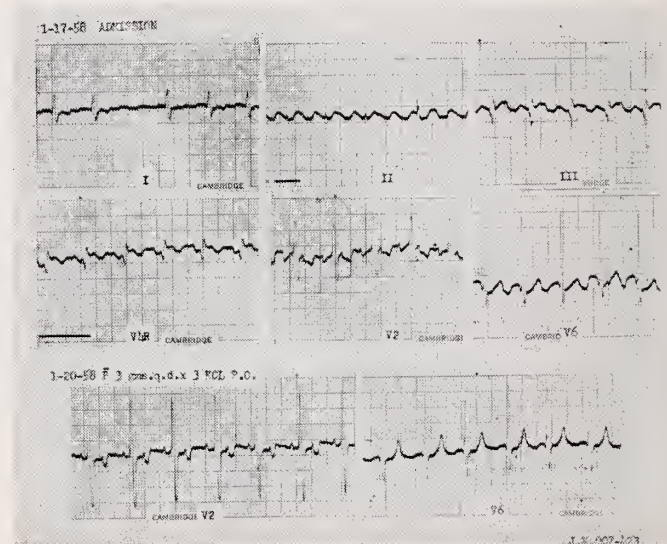


Figure 1: Upper: EKG tracings at admission. Lower: Effect of oral potassium chloride on EKG. See text.

If you look at the other leads, however, you will see atrial beats coming through at quite regular intervals; and particularly in V2 you can see that there is an isoelectric interval between the atrial beats suggesting that this is not atrial flutter as would first be suggested on this lead but is actually atrial tachycardia with a varying degree of A-V response. Since this particular arrhythmia is so common after digitalis and because we knew that this patient had been heavily digitalized by the time she was admitted, it was first thought that this was probably a digitalis induced arrhythmia. She was given potassium chloride on several occasions, and in rather small amounts, she showed some peaking of the T waves. If you compare V6 before and after KCl you will note this finding but without any change in her basic rhythm. I think here again you can see the atrial beats coming through at quite regular intervals (V2) with there usually being 2:1 response as in this case.

Figure 2, you might say, summarizes about 10,000 feet of tracing. These are all lead V2. The first tracing was after she had been given quinidine without being covered by antecedent digitalis. You see the ventricular rate is extremely rapid, being about two hundred beats per minute. There seems to be a P-wave in front of each QRS complex indicating a 1:1 response, and that was about the only effect of that particular quinidine trial. The complexes on the next strip were seen intermittently, and superficially suggest ventricular tachycardia because of the apparently very wide, bizarre QRS complexes. I think that this is a factitious ventricular tachycardia, and believe that these notches on the upslope are really P-waves, or parts of the P-waves fused with QRS complex, and there is also some ventricular aberration. I think that is true because it would shift spontaneously back and forth between these two types of tracing, and in each case the ventricular rate was exactly the same. On every occasion in which the ventricular rate went up to around 200 per minute her blood pressure dropped precipitously, and I am sure had not something been done to reestablish the block she would not have survived. In this particular instance, things seem to be particularly death prone, and she was given intravenous Prostigmine in an attempt to reestablish the AV block quickly, which it did. The figure illustrates just the first conversion. First you see a ventricular rate of about 200, then you have an irregular ventricular response, and after a minute or so it reverted to a fixed 2:1 block.

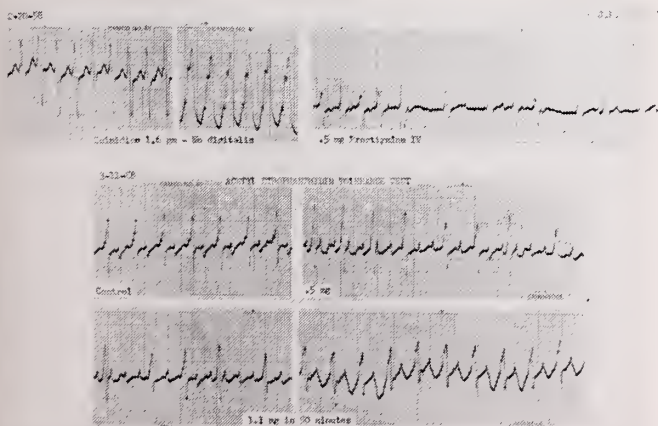


Figure 2: EKG tracings, all lead V2. Upper left: Effect of quinidine with digitalis. Upper right: Action of intravenous Prostigmine to restore partial heart block. Lower: Results of second acetyl strophanthidin tolerance test. See text for details.

The lower portion of Figure 2 represents the last of her two acetyl strophanthidin tolerance tests.

The purpose of the acetyl strophanthidin test is to establish what degree of sensitivity a given patient has to digitalis. It is considered dangerous and it is

certainly unnecessary in the majority of instances. Occasionally it might be useful, and this was probably such a case. If you give acetyl strophanthidin in small doses, say 0.1 or 0.2 milligram every five minutes, you reach approximately maximal effect five minutes after each dose. Therefore, within an hour you can gradually inject what is thought to be a usual digitalizing dose without difficulty. The usual digitalizing dose is about 1.2 milligrams of acetyl strophanthidin. In the first test, and also in this example, you will see that only 0.5 milligram or even less of acetyl strophanthidin reestablished this block. It went from 2:1, to 3:1, and then actually 4:1. After 1.1 milligrams nothing further had happened except for her to have a reasonably high degree of block, 3 and 4:1 in this case. The last strip simply shows a different type of 2:1 block, again the P-waves fusing in the initial portion of the QRS complex so that it looks like it is much more dangerous than it really is.

The fact that she was able to receive this much acetyl strophanthidin without going into any more serious toxicity indicated that at this time at least she was not retaining much digitalis, and this was what dictated a full oral redigitalization.

Moderator: At this time we will ask Mr. Echols to review briefly the pharmacology of digitalis so we can have it clearly in mind as we discuss some of the further points.

Mr. Echols: Dr. Ahlquist has already referred to what the term digitalis implies. It encompasses a large group of compounds which are grouped as cardiac glycosides. The term, cardiac glycosides, is derived from the fact that most of the known digitalis preparations do have a common steroid nucleus and some sort of sugar at the carbon three position. The presence of the sugar is not necessarily essential to the activity of the compound, but it does modify the preparation through its effects on absorbability and persistence of action.

Apparently the active portion of digitalis is the lactone group at position 17. The various synthetic derivatives are merely modifications of the steroid nucleus by the addition of various side chains or groups.

All of the cardiac glycosides have a basically similar action at the cellular level. Any individual differences are entirely secondary as, for example, the speed of onset, persistence of action, stability, absorption rate, and absolute dosage. Differences in the basic action are probably quantitative. The effects of the digitalis preparations are chiefly on the heart, and the secondary, indirect effects may influence the kidney function and water balance. The cardiac effect in the failing heart is principally to increase the force of systolic ventricular contraction at

therapeutic dosage levels. This produces more complete systolic emptying of ventricles resulting in increased output per beat. There is a decrease in the diastolic heart size.

Digitalis also slows impulse conduction of the A-V node and bundle of His. This produces a prolonged P-R interval and when this exceeds 0.24 second leads to A-V dissociation. Digitalis produces a prolonged refractory period of the A-V propagation tissue. However, the refractory period of the atrial and ventricular muscle mass is shortened. Finally, the heart rate is decreased both by a vagal effect and by the increased A-V node refractory period.

The other effects of digitalis are secondary and consist primarily of the diuretic effect which is produced from relief of heart failure with subsequent increase in renal plasma flow and increase in glomerular filtration rate, relief of pulmonary edema and the EKG effects which have been mentioned. Overdosage of digitalis leads to various manifestations in the gastro-intestinal system. Certain visual as well as other neurologic disturbances may occur. The prime concern, however, in digitalis intoxication is cardiac irregularity which may be produced.

Digitalis is well absorbed from the upper intestinal tract. It is distributed fairly evenly in the body but its ultimate fate is unknown. It has been estimated that 40 per cent of a single orally administered dose of digitoxin is eliminated within 12 to 24 days.

There are various preparations which are commercially available, including the derivatives of *Digitalis purpurea* and *Digitalis lanata*, acetyl strophanthidin from *Strophanthus Kombe*, as well as the crystalline preparation, Ouabain, from *Strophanthus gratus*. (Note: Acetyl strophanthidin is not a glycoside. However, the acetate group at the carbon three position serves the same purpose as the sugars attached at this position in the glycosides.)

Moderator: We will go on to quinidine, because in this patient it is a very interesting drug. Dr. Harper will tell us why in this patient the quinidine speeded up the heart rate instead of decreasing it.

Dr. Harper: Quinidine in a situation like this may produce a paradoxical acceleration of the pulse rate because of the fact that it decreases the number of atrial impulses per minute. For example, if in such a case there are 200 atrial impulses per minute, quinidine may slow these to 186 or 175 or 160 impulses per minute. With the higher number of atrial impulses per minute the ventricles fail to respond to every impulse. The junctional tissues are being bombarded with impulses at a high rate and all of

these impulses cannot get through. As the number of impulses slow, as the result of the quinidine action, more of the impulses get through so there comes a critical time when the ventricles begin to respond to each impulse which reaches the junctional tissues, and at this time a so-called 1:1 mechanism or 1:1 response occurs. Therefore, at this time a paradoxical acceleration of the ventricular rate occurs. For example, with 2:1 A-V block, if the atria are beating 200 times per minute, the ventricles are responding only half as many times, with the rate of 100 per minute. With a slight decrease in the number of atrial impulses, say 186 or 170, the ventricles begin to respond to each impulse and paradoxically the ventricular rate increases from 100 per minute to 186 per minute, or whatever the figure might be in the individual case. This is particularly prone to occur when quinidine is administered to patients who have not previously received digitalis.

Quinidine and procainamide have an atropine-like action as far as the ventricular response is concerned to the atrial impulses in the heart, which has not previously been digitalized. If the heart has previously been digitalized, the digitalis, to some extent, counteracts this effect. Otherwise one thinks the patient is doing worse as a result of the increased ventricular rate with the advent of a 1:1 mechanism and becomes faint hearted as far as continuing therapy is concerned. In such a case the ideal thing to do is to continue the administration of quinidine or procainamide in an effort to complete the conversion, if this can be done. Now this case is particularly confusing because to begin with one is in doubt as to whether or not digitalis was productive of the arrhythmia. And the therapy of the arrhythmia, in such a case, fundamentally depends on the answer to that question.

Moderator: We might ask Dr. Harper another question. Is it really necessary in this particular patient, or a similar patient, to treat the atrial arrhythmia?

Dr. Harper: The answer to that question obviously depends on the cause of the arrhythmia. If it is a sign of digitalis intoxication, yes, it is then imperative to treat the arrhythmia because in the Levine and Lown's¹ series of patients the mortality rate even with treatment was 55 to 60 per cent. If, on the other hand, the arrhythmia is idiopathic, which is true in about 19 per cent of the cases, then therapy is not so imperative, and a paradox arises. The ideal therapy for paroxysmal atrial tachycardia of the idiopathic variety is digitalization. So that's why it is so important to decide the etiology of the arrhythmia. If the patient's arrhythmia is not due to digitalis poisoning then digitalis may well be the therapeutic agent of choice. If the patient fails to respond

to digitalis, subsequent quinidine or procainamide, then the question comes up: How long can a person live with paroxysmal atrial tachycardia with block? Levine² has observed one case which has existed for 25 years, and several other cases over varying periods of time for a number of years. So if the ventricular rate can be controlled, the rapid atrial rate is not too disastrous.

Dr. Findley: Has digitalis intoxication been definitely ruled out in this patient?

Moderator: Dr. Witham, would you comment on this point?

Dr. Witham: We were really in great doubt as to whether this patient was over-digitalized at the beginning; and the first acetyl strophanthidin test, or our interpretation of it, was perhaps misleading. The decision boils down to what you call toxicity. We injected about 0.4 or 0.5 milligram of acetyl strophanthidin, and very quickly established a much higher degree of block which actually proved only that the junctional tissue was quite sensitive to digitalis. After the patient had received no digitalis for about two months, and had received adequate trial with potassium to abort this presumptively digitalis induced arrhythmia, we were somewhat more confident when we did the acetyl strophanthidin test again and increased the dosage. Again, after about 0.4 or 0.5 milligram she developed an increased block, and we pushed the amount of acetyl strophanthidin on up to over one milligram without any evidence of further deterioration in the electrocardiogram. I think that for all practical purposes this means that the original arrhythmia was not brought on by digitalis.

The one reason that we were so concerned was that from the standpoint of statistics, about 80 per cent of these arrhythmias are due to digitalis. The second point is that occasionally a patient will apparently retain digitalis bodies for a very long time. We have had several experiences in this regard where a patient may not have had digitalis for a month or so, and just a tiny amount of digitalis will put them back into a digitalis arrhythmia. That was why there was so much confusion about this case. I think now, with all this behind us, we can say that she probably is not now in digitalis intoxication and probably never was.

Moderator: To complete this phase of our discussion Mr. Echols will review the important pharmacology of quinidine so that we can see how it actually fit into this case.

Mr. Echols: Quinidine is one of four well known alkaloids obtained from the cinchona tree and is best known for its potent action on the heart. It is the dextro stereoisomer of quinine. Its general action is

that of a cardiac depressant, and as Beckman³ states "never a stimulant." One of the principal actions of quinidine and similar drugs is to prolong the refractory time. It also depresses the excitability of the muscle. Finally, it decreases vagal tone by what Dr. Harper has referred to as the atropine-like action. It does have contradictory actions, in that it does slow conduction which increases the chance of a local block.

It localizes in the liver, kidneys, adrenals, thyroid, and to a lesser extent in the heart and skeletal muscle. It has been estimated that about 75 per cent of quinidine is destroyed in the body, and the remainder is excreted either unaltered or converted to 2-hydroxyquinidine which is then excreted.

Quinidine sulfate is the most widely used form of the drug. In regard to its toxicity, idiosyncrasies are rare and when they do occur are manifest as allergic phenomena. Shock, vascular collapse, and thrombocytopenia pupura have been described. In the normal heart, quinidine will prolong the PR interval, prolong the QRS interval and produce changes in the QT interval which is prolonged, with flattening and broadening of the T wave. In atrial fibrillation the interval between F waves is increased and in atrial flutter the flutter rate is decreased. It is almost completely absorbed from the gastro-intestinal tract, and it is usually administered orally.

Question from floor: I have two questions. First, what about the future of this patient as far as her arrhythmia is concerned? Second, since her welfare depends in part on the arrhythmia, would she not be better off if induction of fibrillation were attempted? And if so, how would this be done?

Dr. Harper: In the first place I doubt if chronic atrial fibrillation can be induced because she has had a trial on digitalis, quinidine and procainamide as well as other agents, and so far, an intermediary stage of fibrillation has not been described or demonstrated. In the second place, answering the first question last, as we stated before, patients have remained in this arrhythmia for as long as 25 years. It's the same story that we see with chronic atrial flutter or fibrillation. Theoretically it is reasonable to assume, that if the atria are contracting in a unified manner, two or three times to each ventricular contraction, that the heart may well be more efficient than if the atria are fibrillating or just wiggling like a bag of worms. Actually I would prefer to see the patient in either chronic atrial flutter or chronic atrial tachycardia as long as the ventricular rate is controlled. I think that that is the practical answer; if you can control the ventricular rate the patient should get along pretty well. One other question which should be raised somewhere in the course of the discussion, is: Does the patient have

activity of the rheumatic state? Could active rheumatic fever with involvement of the atrial myocardium be responsible for this persistent arrhythmia? That obviously is the reason why she was given a trial on steroid therapy. It's of interest here also that Levine and Lown found two cases in their series of patients whose arrhythmia was due to digitalis intoxication in which the arrhythmia was precipitated by steroid therapy. That's something to keep in mind in such cases. Obviously that was not the case here, however. The persistent congestive failure in this case also raises the question of whether or not a persistent smoldering activity of the rheumatic state may or may not be present. I don't know the answer. The sedimentation rate and C-reactive proteins are suggestive; the ASO titer ruled out any recent active streptococcal infection.

Moderator: We can summarize up to now the following. This patient has what we might call paroxysmal atrial tachycardia. The ventricular rate has been held low by the administration of digitalis in the form of digoxin. (We might mention that, although we don't like to use trade names, with digoxin it might be very helpful to use the trade name, Lanoxin, to avoid confusing the drug with digitoxin.)

Further, in this patient, the use of quinidine caused the ventricular rate to increase, presumably by diminishing the A-V block that was present.

All the therapy in this patient has done nothing so far to stop the atrial arrhythmia. At the present time, on digitalis, the ventricular rate is being kept at a fairly adequate rate which at the present time is about 66.

The other aspect of this case is the congestive failure which was described previously. This congestive failure dates back a number of years and the patient has received digitalis and other treatment. We might go on to the diuretic treatment and ask Dr. Findley if he would briefly compare any of the mercurial diuretics with the new, recently popular chorothiazide.

Dr. Findley: The therapeutic objective is to rid the patient of excess water; but, unfortunately, with the exception of alcohol we have no drug which will result in the preferential excretion of water over salts by the kidney. Other diuretics act primarily by forcing the tubules to reject a variable amount of solutes which carry water with them. Mercury is the tried and true agent on which every cardiologist relies. Nothing of its mechanism of action is known except that it interferes with certain enzymatic processes having to do with the tubular resorption of electrolytes. The organic compounds often result in the predominant excretion of chloride over sodium.

The bicarbonate fraction then has to increase in order to keep the sodium neutralized. There is the potential disadvantage of leading to a predominant excretion of chlorides, hypochloremia, thus increasing a reduction in the plasma bicarbonate concentration and refractoriness to more mercury because the load of chloride offered to the distal tubule has been reduced. The remedy is ammonium chloride.

The introduction of chlorothiazide was welcomed because it seems to have none of these disadvantages. It seems to act equally upon sodium and upon chloride resorption, resulting in an electrolyte excretion rate which carries an equivalent amount of water with it without the induction of a state of alkalosis or of mercurial refractoriness. At first this drug was thought to be a carbonic anhydrase inhibitor like Diamox; however, this action is more apparent in the test tube than in the patient, in whom bicarbonate diuresis with alkaluria and systemic acidosis are not induced by the ordinary doses. This new drug seems to combine the virtues of both the mercurials and Diamox without having very many of their disadvantages. It seems to be a real therapeutic advance.

Moderator: Dr. Abels mentioned a disodium versenate test that was done in this patient. Perhaps he would like to discuss this test.

Dr. Abels: Since we were still somewhat up in the air as to whether the patient was in digitalis intoxication, we thought by giving disodium versenate to lower her serum calcium, we might get some changes in the electrocardiogram indicating whether or not she was in digitalis intoxication. However, we got no change at all.

The method used was to give five per cent dextrose and water with 600 milligrams of the disodium salt of ethylenediaminetetraacetate. Usually within ten to fifteen minutes in people with known digitalis intoxication, there is a return to normal of the electrocardiogram or a reversal from intoxication.

Dr. Witham: This result fits in with the interpretation of the acetyl strophanthidin test.

Moderator: The versenes or other chelating agents are becoming more useful all the time. The one usually available is the calcium disodium versenate which has little effect on serum calcium, being used to remove lead in lead poisoning. It is necessary to be careful with the type versenate used. Some types do bind calcium; some do not. The type described by Dr. Abels is the one that was used in some cases as an *in vitro* anticoagulant. It tends to remove the calcium ions from the blood.

This patient has received not only quinidine but also chloroquine (aralen), another antimalarial that has antifibrillatory effects. As stated, the latter had exactly the same effect in the patient as did the quinidine. Other drugs that could have been used

include quinacrine (atabrine), or some of the antihistaminics. Pronestyl (procainamide) was tried in this patient with no useful effect on the atrial rhythm.

Among other drugs, this patient has been on prednisone with the idea that perhaps there was some active rheumatic process; but as Dr. Harper has already mentioned, some of the laboratory findings tend to rule this out.

Now, are there any questions or comments over any aspect of this case from anyone?

Dr. Abels: I feel after thinking about this considerably, that this girl must have had this valvular disease for a considerable period of time because of the calcium in the valves. It is quite likely that her failure could be on the basis of myocarditis caused by her pregnancy with exacerbations of rheumatic myocarditis. She got well, almost spontaneously, in spite of what we are doing. She does exceptionally well. She can go up and down stairs better than most people in this room without getting short of breath.

Moderator: If she has this extent of activity, it seems that even with the atrial tachycardia, the heart is well compensated and the ventricle is putting out an adequate amount of blood. Are there any other comments or questions?

Dr. Findley: Does one of the surgeons have anything to offer this girl? It seems to me that Frank Wilson some years ago recorded terminating a couple of these paroxysms by having the vagus nerve exposed by the knife and electrically stimulated.

Moderator: Dr. Findley wants to know if this patient could be treated surgically by doing something to the vagus nerve. I presume he wants to slow the atrial arrhythmia. Many drugs have been tried for this sort of thing in paroxysmal atrial tachycardia: Acetylcholine itself; methacholine, which acts a little longer; some of the cholinesterase inhibitors such as neostigmine (prostigmine), administration of Ipecac to produce nausea and vomiting and reflex activation of the vagus, and the administration of phenylephrine (Neo-Synephrine) to raise the blood pressure to produce reflex vagal bradycardia. We might ask Dr. Harper if he would predict what would happen if some of these are tried in this particular patient.

Dr. Harper: I'm afraid the results would be disappointing. As for Dr. Findley's question about the possibility of surgical stimulation of the vagus, I'm sure that it could be done and it might transiently alter the situation. Yet with the clinical course which this woman has presented to date, I think that one should be pessimistic as far as any permanent benefit is concerned. We still end up in a case of this sort with well marked, chronic, serious heart disease with the cardiodynamics secondary to a chronic valvular disease. I wonder if

the exacerbations after pregnancy were not just due to increased work of the heart rather than to actual myocardial involvement. I think if Dr. Abels' idea about myocardial involvement after pregnancy is valid, that would mean that each pregnancy activated the latent or dominant rheumatic state, for which there is no very good evidence. I think that as a last resort we have to be content with marking time with this woman as best we can, controlling her heart failure as best possible and making every effort to keep her ventricular rate as near normal as possible. With such therapy she may well get along for some indefinite period of time.

Dr. Abels: Would you say her pregnancies increased the work of the heart each time? What about the last pregnancy before she had any difficulty at all?

Dr. Harper: That's a good point. When I had a clinic on this woman some weeks ago, without seeing the patient first, without hearing her murmurs or knowing anything about her, we wondered then about a so-called Fiedler's myocarditis or idiopathic postpartal myocarditis and myocardial involvement of that sort. So that's a very good point, and there is no ready answer to it.

Dr. Abels: On the testimony of her aunt and sisters, after her first episode of failure she was asymptomatic for one year and could do all kinds of work, scrubbing floors, going up steps and taking care of a child.

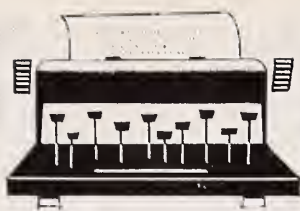
Dr. Harper: I think there is at least a 50-50 chance that the pathologists might demonstrate activity of the rheumatic state in spite of other points to the contrary. Certainly there is no surgery for her valvular disease that I think would be worth trying. Open heart surgery for correction of mitral regurgitation might offer something, but at this time this is not being widely done, and one would not be enthusiastic in advising it.

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ERRATUM

THE JOURNAL STAFF wishes to apologize for the omission of the names of Drs. Fernando Varela Acosta and Jessee William Veatch, Jr. from the by-line of the article "Venous Mesenteric Thrombosis" in the May issue. Drs. Acosta and Veatch were co-authors with Dr. Skandalakis.



editorials

HAL M. DAVISON

THE RECENT DEATH of Hal M. Davison represented a real loss to Georgia medicine. His selfless contributions of time and energy to the medical profession in Georgia will not soon be forgotten.

He was every inch a man's man, and all those privileged to work with him were impressed by his characteristic directness in attacking all problems. He was a tireless worker for any cause in which he believed. Whatever his stand on a question, his sincerity was never questioned by friend or foe. His incisive ability to see through a maze of irrelevant details in controversial discussion continued to astonish his colleagues. His presence at MAG Council Meetings seemed to provide a catalytic influence in arriving at reasonable solutions to obviously complicated problems.

Not only was Dr. Davison a man's man, but he was a true gentleman in every sense of the word. His personal charm was so completely spontaneous and natural that one immediately felt at ease in his presence. This rare quality contributed in no small part to his effectiveness as a physician.

Dr. Davison's stature in his chosen specialty of allergy has long been recognized. His contributions in this field were many.

His interests outside the field of medicine were manifold and brought him into contact with individuals from all walks of life.

He is missed and will continue to be missed by all those privileged to know him.

ACUTE NURSING SHORTAGE

WITH THE SHORTAGE of trained nurses becoming increasingly critical, the Georgia Commission on Nursing is seeking to obtain the counsel of the doctors of Georgia in attacking this problem. Unless some measures are taken immediately to alleviate this alarming situation, the quality of medical care available within the state is bound to deteriorate. Elsewhere in this issue a questionnaire appears. It is hoped that all doctors will take a few moments to ponder these questions and forward their suggestions to the Atlanta office of the Commission on Nursing.

HYPERTENSION AND THE KIDNEY

IT IS 25 YEARS since Goldblatt¹ demonstrated that prolonged hypertension could be produced in dogs by reduction in the arterial blood supply to the kidney. Since then a library of experimental data has been accumulated without adequately explaining the mechanism involved in the Goldblatt kidney. Three years after these classic experiments, Butler successfully treated a hypertensive child by the removal of a diseased kidney.² Now the fat was in the fire, and nephrectomy as a treatment for hypertension became widespread—almost a panacea. Renal physiologists, and particularly Homer Smith, aware of this headlong plunge, sought to stem the tide by judicious and objective investigation. In 1948 and again in 1956 Smith objectively reviewed the literature on cases of hypertension with unilateral renal disease treated by nephrectomy, and found a poor 19 per cent cure rate.^{3,4} Such poor results were due to the diagnostic criteria employed or failure to appreciate the basic pathology involved in the diseased kidney. Hence it was a welcomed sight to witness the arrival of new diagnostic techniques which would permit a better selection of patients so that they could be promised something more than 1-5 odds for the loss of the kidney.

Definite standards for the diagnosis of hypertension resulting from unilateral renal disease have now been established. On the basis of White's⁵ studies on sodium and water excretion by the animal's kidney whose renal artery had been partially ligated and the normal kidney, Howard⁶ reported the use of differential catheterization studies in man in the detection of unilateral renal disease as the cause of hypertension. The kidney diseased by vascular changes within the renal artery or its branches does not excrete sodium or water as well as its undiseased

counterpart. Ferris and co-workers⁷ measured the response of a patient to the injection of an autonomic blocking agent such as tetraethylammonium chloride. If the reaction was a slight systolic depressor effect and an over-all diastolic pressor response, unilateral renal disease of the vascular type was probably present. If the response was a dramatic depressor effect, the hypertension was unrelated to a unilateral diseased kidney if one was present.

Those cases of hypertension therefore associated with unilateral renal disease as suggested by autonomic ganglionic blocking agents, sodium and water excretion studies, or more conventional intravenous or retrograde pyelographic examinations should be subjected to aortographic interpretation. The injection of opaque media into the aorta and renal arteries will demonstrate any differences in the arterial pattern and arborization of the two sides. A careful study of the renal arterial tree may reveal decreases in the lumen of a renal artery, an aberrant renal arterial pattern or a patchy area of ischemia which the usual radiographic techniques fail to demonstrate. Likewise, the removal of a unilateral atrophic kidney whose renal arterial tree is within normal

limits and whose TEAC and sodium—water excretion tests are within normal limits, will not result in a reversal of the hypertensive picture. Hence, a plea goes out to the practitioner who sees so many hypertensive individuals to offer them the diagnostic techniques recently reported, with the hope that unilateral renal disease of the vascular type will be uncovered and a cure of their hypertension by nephrectomy result therefrom.

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GUNDERSEN NEW AMA PRESIDENT

DR. GUNNAR GUNDERSEN, 61-year-old surgeon from LaCrosse, Wisconsin, has been inaugurated as the 112th president of the American Medical Association. He succeeds Dr. David B. Allman of Atlantic City, N. J.

Dr. Gundersen, born in LaCrosse, April 6, 1897, began the private practice of medicine in 1922 as an associate of his father. He now operates the Gundersen Clinic in LaCrosse, along with three of his physician brothers. Two other physician brothers are practicing in Boston, Mass., and Hanover, N. H., respectively.

Dr. Gunnar Gundersen did his prep school work in Oslo, Norway, and returned to the U. S. to obtain his B.S. degree at the University of Wisconsin in 1917, and his M.D. at Columbia University in 1920. He served his internship and residency at LaCrosse Lutheran Hospital.

Dr. Gundersen has been active in state and national medical affairs throughout his practice. He was president of the State Medical Society of Wisconsin for the year 1941-42, served on a number of the society's committees, and was speaker of its House

of Delegates for about five years. He was a member of the A.M.A.'s House of Delegates in 1937 and 1938, and was elected to the A.M.A.'s Board of Trustees in 1948, serving in various capacities ever since. He became chairman of the Board in June 1955. He was elected the first chairman of the Joint Commission on Accreditation of Hospitals, formed in 1951, and served in that capacity until 1953.

He is past president and former member of the Wisconsin Board of Health, and a former member of the State Board of Regents of the University of Wisconsin. Currently he is preceptor in charge of the medical students who come up from the University of Wisconsin to the Gundersen Clinic.

Dr. Gundersen is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and the International College of Surgeons, a member of the Council of the World Medical Association, and a member of the American Public Health Association.

Dr. Gunderson recently addressed the House of Delegates of the Medical Association of Georgia at the *104th Annual Session, Macon, April 27, 1958.

RETURN TO
GEORGIA COMMISSION ON NURSING
116 MITCHELL STREET, S. W.
ATLANTA 3, GEORGIA

QUESTIONNAIRE

What is the Problem? The shortage of Registered Nurses seriously threatens adequate patient care in our hospitals.

1. What are the causes of the problem?
2. What are the solutions to the problem?
3. What is the best solution?
4. What action would you recommend to take?

The Commission on Nursing will appreciate your cooperation on this as they are soliciting as many opinions as possible.



THE ABUSE OF NARCOTICS BY PATIENTS SUFFERING FROM CANCER

ENOCH CALLAWAY, M.D.

LaGrange

FOR SOME UNKNOWN reason the use of narcotics by cancer patients in Georgia has increased tremendously in the past year. I have had increasing difficulty in handling this problem in the Clinic and I have also noticed that requests to the Georgia Division of the American Cancer Society for financial aid to patients for the purchase of narcotics has doubled in the past six months. Apparently the problem is not a local one.

The usual story is that a doctor has been called to see the patient at home and has been told by some member of the family that the patient has cancer and is suffering and needs relief. Under this type of pressure a small amount of narcotics is prescribed and the chain reaction of addiction is set off.

Addiction to narcotics does not make any patient happy. Addiction to narcotics entails a terrific additional strain on the patient's family. Addiction to narcotics makes the patient uncooperative, makes his

nutrition suffer, and can seriously affect his chance for a cure.

No physician should prescribe narcotics for cancer patients without first consulting with the doctor responsible for the treatment of the cancer. It should be remembered that these patients are easily persuaded that they are incurables and should have relief and therefore will develop habituation more readily than other people.

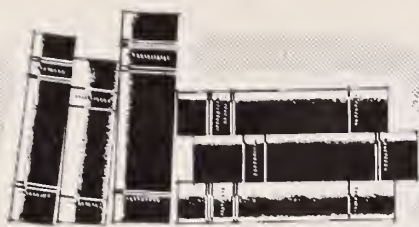
Severe radiation reactions are not as painful as they appear. They take several weeks to subside and are not an indication for narcotics. Addiction will inevitably result before the reaction subsides if narcotics are given.

Most patients who die from cancer do so without suffering severe pain. Many die without suffering any pain.

The diagnosis of cancer is not in itself an indication for narcotics.

The physician who first gives one of these patients narcotics should have carefully secured all possible information concerning the patient's condition and carefully considered every phase of the case. The burden of this responsibility is heavy, since ill considered use of drugs can easily remove all chance of the patient's survival.

All other possible methods of relief must be exhausted before the use of narcotics is justified.



physician's bookshelf

BOOKS RECEIVED

Aegerter, Ernest, M.D., and John A. Kirkpatrick, Jr., M.D., **ORTHOPEDIC DISEASES**, W. B. Saunders Company, Philadelphia, 1958, 602 pp., \$12.50.

Chusid, Joseph G., M.D., and Joseph J. McDonald, M.D., **CORRELATIVE NEUROANATOMY AND FUNCTIONAL NEUROLOGY**, Lang Medical Publications, Los Altos, Calif., 1958, 337 pp., \$4.50.

Dudley, H. A. F., F.R.C.S.E., **PRINCIPLES OF SURGICAL MANAGEMENT**, E. & S. Livingston Ltd., Edinburgh and London, 1958, 194 pp., \$6.50.

Fleming, Jack W., M.D., **A PRIMER ON COMMON FUNCTIONAL DISORDERS**, Little, Brown & Company, Boston, May 1958, 170 pp., \$5.00.

Gafman, John W., M.D., Alex V. Nichols, Ph.D., and E. Virginia Dobbins, Sr., Dietitian, **DIETARY PREVENTION AND TREATMENT OF HEART DISEASE**, G. P. Putnam's Sons, New York, 1958, 256 pp., \$3.95.

Higgins, George A., M.D., F.A.C.S., and Thomas G. Orr, Jr., M.D., F.A.C.S., **ORR'S OPERATIONS OF GENERAL SURGERY**, W. B. Saunders Company, Philadelphia, 1958, 1016 pp., \$20.00.

Markell, Edward K., M.D., and Marietta Vage, Ph.D., **DIAGNOSTIC MEDICAL PARASITOLOGY**, W. B. Saunders Company, Philadelphia, 1958, 276 pp., \$7.00.

Martin, Gustav J., Sc.D. (Editor), **CLINICAL ENZYMOLOGY**, Little, Brown & Company, Boston, 1958, 230 pp., \$6.00.

Nice, Charles M., Jr., M.D., Alexander R. Margulis, and Lea G. Rigler, **ROENTGEN DIAGNOSIS OF ABDOMINAL TUMORS IN CHILDHOOD**, Charles C. Thomas, Springfield, Illinois, 1957, 66 pp., \$4.00.

Nayes, Arthur P., M.D., and Lawrence C. Kalb, M.D., **MODERN CLINICAL PSYCHIATRY**, W. B. Saunders Company, Philadelphia, 1958, 694 pp., \$8.00.

Rosen, George, M.D., **A HISTORY OF PUBLIC HEALTH**, MD Publications, Inc., New York, June 1958, 495 pp., \$5.75.

Walstenhalme, G. E. W., O.B.E., M.A., B.Ch., and Cecilia M. O'Connor, B.Sc., **THE CEREBROSPINAL FLUID**, Little, Brown & Company, Boston, 1958, 335 pp., \$9.00.

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

REVIEWS

Albert F. R. Andresen, M.D., **OFFICE GASTROENTEROLOGY**, W. B. Saunders Company, Philadelphia, 1958, 639 pp.

While library shelves are filled with books dealing with gastroenterology, many are good for reference purposes and too few are suitable for teaching purposes. Dr. Andresen has performed a real service in writing and publishing this particular book. It presents in logical fashion the background and concepts of gastroenterologic disease. In many instances simplification of concepts has been made for teaching purposes. In turn there is an application of the basic principles to the concepts of various gastrointestinal diseases themselves. Of importance is the presentation of the physiologic indications for treatment.

It is felt that this volume is an excellent one for any physician interested in gastroenterology, whether as a specialist or as an internist. The appeal to the general practitioner should be excellent because of the practical presentation of material.

—John S. Atwater, M.D.

Troland, Charles E., and Frank J. Otenasek, **SELECTED WRITINGS OF WALTER E. DANDY**, Charles C. Thomas, Springfield, Illinois, October 1958, 789 pp., \$15.00.

This collection, which includes 85 per cent of all his published papers, is representative of many of Walter E. Dandy's primary interests. It covers a large portion of the gamut of neurological surgery of his time. The first paper published in 1911 was on the blood supply of the pituitary body, being concerned with careful anatomical preparations in the Hunterian laboratory. The last paper published July 1946 appeared three months after Dr. Dandy's death and was concerned with the center of consciousness in the brain, a favorite topic of speculation for the author. The original articles on ventriculography and encephalography are classics.

The major topics covered are treatment of hydrocephalus and the associated study of formation and absorption of fluid within the brain, third ventricular tumors, and tumor removal and sectioning of the fifth, eighth, ninth and tenth cranial nerves in the cerebello-pontine angle. Later articles included are related to the various vascular anomalies within the brain as well as three papers on the intervertebral disc.

Dr. Dandy demonstrates well the value of an independence of spirit and of investigation coupled with accurate observation and accurate follow-up. Certainly his brave surgical attack has helped to make the way easier for those who follow him. The compilers are to be congratulated on their care in collecting all major papers without undue repetition.

Charles E. Dowman, M.D.

James, D. Geraint, **THE DIAGNOSIS AND TREATMENT OF INFECTIONS**, Charles C. Thomas, Springfield, Illinois, November 1957, 224 pp., \$6.00.

This book represents an up-to-date and comprehensive analysis of the rapidly changing field of antibiotics and infectious diseases. The book is divided into three parts. The first part consists of information on chemotherapeutic agents, the second part deals with pathogenic microorganisms, and the third part is concerned with

infections as they are presented in various systems.

The author is to be complimented upon a comprehensive, yet concise appraisal of current knowledge, diagnosis, and treatment of infection. Much of the information is presented in condensed form, such as charts and outlines. Because of the very comprehensive nature of this book, at times one would desire more detailed consideration of certain aspects of the clinical features; yet to comply with this would defeat the purpose of the book. The book should prove valuable for undergraduate education and also for the busy practitioner as a handy office reference.

Charles A. LeMaistre, M.D.

Barnes, Josephine, M.D., F.R.C.S. (Eng.), F.R.C.O.G., THE CARE OF THE EXPECTANT MOTHER, Philosophical Library, New York, 1956, 270 pp., \$7.50.

The Care of the Expectant Mother was written by Josephine Barnes, M.D., of London, England. Although the reviewer has no personal knowledge of the author or of her previous contributions to the obstetric literature, the biographical data supplied on the fly sheet attests to the fact that she is qualified to write such a work. The book is written for doctors and nurse midwives. The latter are not to be confused with lay midwives.

This is a short book that could almost be classified as an outline of obstetrics. It is arranged in an orderly fashion and covers the more important phases of obstetrics. The basic physiology and pathology presented are sound. The therapy as outlined is, in general, sound. Some, however, may be called outdated as compared to that practiced in this country.

A basic fault of this and many other works of a similar nature is that in attempting to cover such a large field in such a small work, many important subjects are merely touched. This gives one the impression of "short-cutting."

One chapter is devoted entirely to maternity services available in Britain. This would have no value to the practitioner in this country.

The reviewer feels that although this is a sound but brief book on obstetrics, one would profit more by investing in one of the standard text books of obstetrics.

Samuel R. Poliakoff, M.D.

Myers, J. Arthur, M.D., TUBERCULOSIS: EVERY PHYSICIAN'S PROBLEM, Charles C. Thomas, October 1957, 278 pp., \$7.50.

This is a small (278 pages), handy book by one of the most prolific writers in the tuberculosis field.

The format, printing, and style are excellent.

The reader's interest is stimulated by the opening chapter which is a concise summary of the ancient as well as the modern history of tuberculosis.

The book is well written and thought provoking, but one gets the impression that Dr. Myers has a grudge against current medical opinion. Considerable space is given to severe criticism of many of the dicta of tuberculosis philosophy. For example, the entire subject of B.C.G. vaccination is summarily dismissed as a dangerous practice of no real value. Apparently, the sole reason for this assumption being the alteration of the tuberculin reaction. No mention is made of the beneficial results of B.C.G. vaccinations reported in the

Scandinavian literature.

The tuberculin test is hailed as the key tool in the "eradication" program against tuberculosis. In fact, Dr. Myers argues that everyone with a positive tuberculin reaction should be considered as a tuberculous suspect for the rest of his life.

A general summary of tuberculosis as it affects each system of the body is briefly presented. Included here are diagnostic hints and notes on treatment.

This book is in no way a reference volume. It is more of a plea against complacency in organized medicine's fight against the tubercle bacillus and a provocative outline of an offensive aimed at its possible eradication.

Bernard Wolff, M.D.

Dahlin, David C., M.D., BONE TUMORS, Charles C. Thomas, Springfield, Illinois, October 1957, 219 pp., \$11.50.

This is a very excellent Atlas of neoplastic involvement of human bones, both benign and malignant, primary and metastatic. The presentation is concise and is primarily graphic and illustrative with excellent reproductions of gross pathological specimens, photomicrographs, and roentgenographs.

Location, age, and sex incidence is described graphically and in tabular form. End-results are not included in this volume; and because of the nature of the Atlas, the bibliography, though it is adequate for the purpose and contains only the most pertinent references, must not be considered complete by any means.

The relative space allowed each type of tumor may be misleading if considering the incidence and/or importance of each type, and it is at once apparent that only the most typical examples are illustrated. As would be expected, therapy is "touched upon" by only a brief outline.

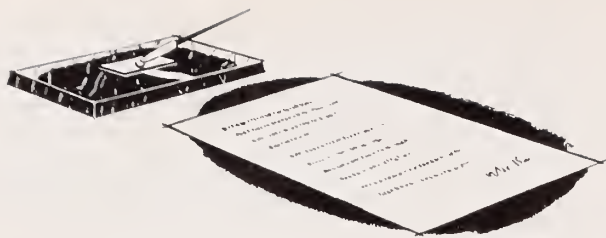
This volume is not, nor is it intended to be considered an extensive reference book of bone tumors; it is a succinctly-presented pictorial display of the bone tumors seen in the Mayo Clinic over a 40-year period.

Neil G. Perkinson, M.D.

Charles M. Nice, Jr., M.D.; Alexander R. Marguilis, M.D.; and Leo G. Rigler, M.D., ROENTGEN DIAGNOSIS OF ABDOMINAL TUMORS IN CHILDHOOD, 70 pp.; 52 illustrations. Charles C. Thomas, Publisher, Springfield, Illinois.

This book is written primarily for radiologists, pediatricians, and surgeons interested in the preoperative diagnosis of abdominal tumors in childhood. Frequently children are operated upon with palpable abdominal masses before an accurate diagnosis has been made or attempted. This monograph points out that the location of the mass can be made with a high degree of accuracy, and on a statistical basis frequently a correct pathological diagnosis can be determined. Simple methods such as plain antero-posterior-supine, upright, lateral decubitus, and lateral projections of the abdomen are used. Supplementary procedures such as barium studies of the gastro-intestinal tract, excretory and retrograde urography, and intravenous cholangiography are also used. Presacral CO₂ insufflation and planigraphy may be of value. The authors classify the abdominal tumors in childhood into four major categories, namely, (a) masses in the region of the liver, (b) other intraperitoneal masses, (c) renal and adrenal masses, and, (d)

Continued on page 360



abstracts by georgia authors

Wilkinsan, Albert H., Jr., M.D.; Thomas L. Buttram, M.D.; William A. Reid, M.D.; and Jahn M. Howard, M.D., Emary University Medical School, Emary University, Georgia, "Cardiac Injuries: An Evaluation of the Immediate and Long Range Results of Treatment," *Ann. Surg.* 147:347-352 (March) 1958.

The increased frequency with which cardiac wounds are encountered by surgeons in all localities makes necessary a more clearly defined approach to their management interpreted in respect to the long range outcome. Treatment by pericardiocentesis as advocated by Elkin and Campbell in 1950 has stirred controversy in the approach to their management.

A report of the continued experience in treating cardiac tamponade by pericardiocentesis with follow-up studies of these patients from five to 13 years following injury is presented. The report includes 52 patients. Follow-up studies were achieved on 35 patients, or 78 per cent of those surviving injury. In the group of patients followed five years or longer, 95 per cent are working and manifest no cardiac difficulty. Of the patients observed for a period of less than five years, only one patient is unable to maintain a full work schedule. In this case the patient is incapacitated by congestive heart failure that has resulted from a laceration of the interventricular septum.

The results of this and other recent reports support the concept that immediate relief of cardiac tamponade by aspiration of the pericardial sac is commensurate with total rehabilitation of the patient. No patient showed any evidence on constrictive pericarditis. The occasional patient who does not respond well to initial pericardiocentesis repeated once or twice will have to undergo exploratory thoracotomy. This approach to management has resulted in a lower mortality rate than the approach of immediate thoracotomy without pericardiocentesis.

Chambers, William R., 384 Peachtree Street, N.E., Atlanta, Georgia, "The Differential Diagnosis of 'Strokes'," *G.P.* 17:111-116 (April) 1958.

Strokes now are the third cause of death in the United States ranging in

the amount of 170,000 a year. Not all strokes are untreatable thromboses. Subdural hematoma, brain abscess, and brain tumor may present exactly the same symptoms and sudden onset. Characteristic differentiating signs such as papilledema and increased spinal fluid pressure may not be present in the older age group. Recurrent minor neurological signs of several months, subtle personality changes, headache changing position or intensity, high spinal fluid protein, and of course, a shift of the pineal on skull films should incite suspicion of a space taking lesion.

Carotid angiography has become much safer and is being done now in some centers without regard to age. It is of great assistance in delineating the types of lesion present. Safety depends on the adherence to sensible technique, the experience of the one who performs the test, and the skill of the team.

Greenblatt, Robert B.; Jorge Martinez Manautou; Sarah Louise Clark, and Alfred P. Rosenberg, Medical College of Georgia, Augusta, Georgia, "Suppression of Adrenal Cortical Activity in Treatment of Menstrual Disorders," *Metabolism* 7:25-39 (Jan) 58.

Cortisone, hydrocortisone, prednisone, and prednisolone have been successfully employed in the treatment not only of frank cases of congenital adrenal hyperplasia but also in the vague forms which we call adrenal dysfunctions associated with menstrual disorders. Aside from clinical manifestations the findings of abnormally high urinary values for 17-ketosteroids, increased beta 17-ketosteroids (dehydroepiandrosterone), pregnanediol chromogens, and pregnanetriol should lead one to suspect an adrenal component as a causative factor for menstrual disorders in women with or without some degree of virilism. In one case of adrenogenital syndrome with high 17-ketosteroids and pregnanetriol, it is of interest to note that administration of 17-hydroxyprogesterone caproate could decrease pregnanetriol excretion but could not reduce 17-ketosteroid production. With the administration of cortisone, however, 17-ketosteroid and pregnanetriol output were considerably reduced.

Vayles, Walter R. and William H. Maretz, Medical College of Georgia, Augusta, Georgia, "Rupture of Aortic Aneurysms into Gastrointestinal Tract," *Surgery* 43:666-671 (April) 1958.

Rupture of abdominal aortic aneurysms into the gastrointestinal tract is presented as a cause of upper gastrointestinal bleeding, with a review of the 62 previously reported cases. The sixty-third such patient, and the first, in our review of the literature, in whom the aneurysm was surgically excised, is described.

In approximately 60 per cent of these patients, the time interval between the initial bleeding episode and death was sufficiently long to permit possible surgical intervention. In three-fourths of the patients, the aneurysm appeared below the origin of the renal arteries and from that standpoint would have been surgically correctable. Theoretically, then, nearly one-half of such patients may be salvagable by surgery. In view of the present status of vascular surgical techniques, early operation should now be seriously considered for those bleeding patients in whom a pulsating abdominal mass, particularly a tender one, suggests a ruptured aneurysm as a likely cause of the gastrointestinal bleeding.

Waugh, William H., M.D., and William F. Hamilton, Ph.D., Medical College of Georgia, Augusta, Georgia, "Physical Effects of Increased Venous and Extrarenal Pressure on Renal Vascular Resistance," *Circulation Research* 6:116-121 (Jan.) 1958.

Previous investigators have shown that the normal mammalian kidney possesses remarkable circulatory autonomy, for despite variations in renal arterial pressure between about 50 and 200 mm. Hg, the denervated kidney can change its vascular resistance and maintain renal flow and glomerular filtration at a relatively constant rate. The question as to whether renal circulatory autoregulation is due to an active intrarenal reaction of some type or is due to a passive physical process is unsettled. Some recent work suggests that it is due to the viscous role of blood cells in their transit through the kidney. In the present study, autoregulation of renal flow was demonstrated in completely isolated kidneys perfused with Ringer-Locke solutions modified to contain dextran or polyvinylpyrrolidone as colloid. Autoregulation of renal flow of colloidal solutions devoid of corpuscles was not depressed by a few minutes of anoxia but was completely removed by procaine treatment or by perfusion with mineral oil. It is concluded that blood corpuscles, intrarenal nervous reflexes, and vasoactive tissue metabolites are not basically involved in renal circulatory autoregulation. It appears to be accomplished by a direct and active myogenic response of vasoconstriction when the distending pressure is increased and an active intravascular muscle reaction of dilation when the intravascular pressure is lowered. This postulated myogenic reaction may be one of the most important physiologic mechanisms by which the renal circulation is normally controlled.

Martin, J. D., Jr.; H. Harlan Stone; and Frederick W. Cooper, Jr., Emory Hospital, Emory University, Georgia, "The Utilization of Hypothermia in Early Burn Therapy," *Surgery* 43:258-265 (Feb) 58.

Recently, great interest has developed in the use of hypothermia and its practical application during surgical procedures. This has been especially true in surgery of the heart, great vessels, brain, and liver. Great hopes were once held for it in the treatment of neoplasms, but these have not materialized. The use of hypothermia as an adjunct to burn therapy seemed worthy of investigation, as has been previously suggested.

The study of a group of experimentally produced burns in the animal was undertaken, both as controls and with the animal in the state of hypothermia, with particular concentration on the various responses during the critical period of the burn. It was concluded from these experiments that hypothermia may be an adjunct to therapy; that the metabolic rate is definitely

lowered; and water, electrolytes, and plasma accumulation are diminished in the burn areas.

Adequate amounts of water, sodium, and blood or plasma must be provided; and their administration must be continued, especially during the warming up period. Renal function is definitely augmented, while hyperkalemia is either lessened or prevented by the maintenance of urine flow and the deceleration of potassium absorption.

Although hypothermia is itself a stressful condition, the gains achieved may be of value in the severely burned animal. Severely burned dogs do well for at least forty-eight hours, when brief hypothermia is added to the initial regimen of therapy.

Howard, John M., Emory University, Georgia; and David Knox, Houston, Texas, "Studies on the Effect of Cortisone on Specific Gastrointestinal Functions: The Systemic Response to Injury," *Am. Surg.* 23:647-649 (July) 1957.

Previous studies by one of the authors had demonstrated that following injur-

ies to various parts of the body, the biological response to trauma included the following three phenomena. Cephalin flocculation became quite marked, giving readings of standard tests of three plus to four plus over a period of several days. Simultaneously the serum amylase concentration dropped. The gallbladder could not be visualized by oral techniques or by the intravenous administration of the older radiographic media.

The current study was undertaken in normal human volunteers to see if these phenomena could be reproduced by the administration of 200 mg. of cortisone daily for three days. Six subjects were studied; studies being made before administration of the cortisone during the period of administration and the day following cessation of administration of the drug.

In no instance were the observations attributable to injury reproduced by the administration of cortisone. This suggested that the specific changes under study had not resulted from a corticoid response.

MAG-V.A. CARE PROGRAM CONTRACT DISCONTINUED

THE MEDICAL ASSOCIATION of Georgia, acting on authority of the Association Council, will not renew its present full service Veterans Administration contract which expires June 30, 1958. This contract between the MAG and the VA provided a fee schedule for services rendered by MAG physicians; said fee schedule being a maximum schedule of allowances as negotiated by MAG and the VA for eligible participants.

The Association, contracting for those MAG members wishing to treat Veterans under the provisions of this "VA home town care program," sought certain revisions in the maximum schedule of fees. This schedule of fees was originally negotiated in 1949 and has been renewed by the Association annually without change since that date. Some of the Association's proposed recommendations were approved by the VA, but others were disapproved. MAG Council then reaffirmed their earlier position and ruled that the Association should not agree to an inequitable schedule for its membership.

In the absence of a contract between the MAG and the VA for this type care, the VA Regional Office has informed the Association of the following regulations for this program which will be administered by the VA on a direct "VA-to-Doctor basis."

"Physicians already certified to the Veterans Administration under the terms of existing contracts with professional organizations, such as the Medical

Association of Georgia, as meeting eligibility criteria, may continue to be utilized subsequent to July 1, 1958, without the need for re-designation.

"All physicians not comprehended in the above paragraph but desiring to participate in the Veterans Administration Medical program on fee basis for the first time following the beginning of Fiscal Year 1959 (July 1, 1958), should make their desires known to the Chief Medical Officer, VA Regional Office, 441-49 West Peachtree St., N.E., Atlanta 8, Ga. An application blank will be furnished direct to the physician making the request.

"The Medical Fee Schedule to be used effective July 1, 1958 is the standard VA schedule. The Chief Medical Officer is having this Fee Schedule reproduced and will mail copies to all active participating physicians in Georgia. It is hoped distribution will be made before July 1, 1958 which is the effective date of the schedule."

The Medical Association of Georgia, no longer being the contractor with the VA on this government program, wishes to emphasize that the program's fees and services are a matter left entirely to each individual doctor's discretion in his dealings with the VA. The Association believes its present contract expiring June 30, 1958 to be inequitable and therefore will no longer serve as contractor for the program, having unsuccessfully attempted to negotiate a more equitable contract for its membership.



president's letter

PURIFICATION OF THE COMPOUND

LEE HOWARD, SR., *Savannah*

THIS IS AN introductory chapter to a monthly page that is in furtherance of my "Chemical Experiment with M.A.G." in my President's Address.

After perfecting and inactivating the compound, the next important step is purification. Chemists and physicians know no more about chemical reagents and drugs than the manufacturer places on the label. Different degrees of purities are indicated and traces of other chemicals, when present, are noted. Very few chemicals are absolutely pure. Some impurities are dangerous and cannot be allowed. Others are not harmful but detract from the value of the reagent or drug. It is my feeling that contaminants in medical organizations are diminishing.

In the first category, dangerous impurities, "Proven Dishonest Charlatans," probably constitute only one or two per cent of our larger county societies. However, the threat to organized medicine is great and

twofold, out of proportion to numbers. Just a few of these physicians who are members in good standing in our county societies reflect and discredit all of us as well as impose on the public. We hope in subsequent chapters to find ways and means for elimination of these impurities.

In the secondary category, interfering contaminants, "Money Grabbers," make up a higher percentage. These may be increasing.

In the third category, the interfering impurity, "Incompetence," is still with us but is decreasing.

We are doing something about categories two and three but have done nothing about category one, and we seem to be completely impotent under our present codes and organizations.

The chief method for purifying chemicals is that of extraction and my next chapter will be entitled "Extractions."

BOOK REVIEWS / Continued from Page 357

other extra-peritoneal masses. The various masses encountered in each category are discussed principally on the basis of their radiographic appearance. In general, localization is determined by displacement of adjacent anatomic structures. Displacement of stomach, colon, kidneys, and small intestines being the major structures considered. Appropriate contrast media are

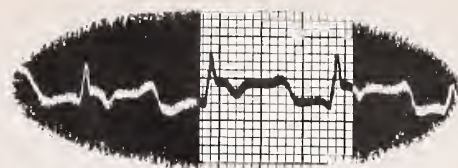
used to better delineate the various structures and films are taken in at least two projections.

The classification is workable. The general principle is sound and the method is not complicated. This short monograph should prove useful to radiologists, pediatricians, and surgeons.

Ernest G. Smith, Jr., M.D.

THE HEART IN DIABETIC KETOSIS

N. H. DeVAUGHN, M.D., *Augusta*



heart page

DIABETIC KETOSIS PROFOUNDLY alters the body's chemistry. The cardiovascular system is often affected, principally by dehydration and associated disturbances in electrolytes. The harm from these is so predominant that the effect of acidosis itself is minor and lies in its influence on salt and water balance. Previous heart disease, so common in diabetics, enhances this injury. Furthermore, additional damage to the heart may occur due to certain characteristics of this disorder.

The severe dehydration of diabetic coma has many causes. Hyperpnea, glucose diuresis, and vomiting are contributory, but the urinary loss of sodium and potassium in combination with ketones and other acids is the greatest factor. Decreased sodium does not maintain the blood volume. When the shrinkage is great enough, shock follows. The hypotension decreases coronary flow and may cause myocardial ischemia and heart failure.

The importance of potassium as a bulk ion has obscured its equally essential role as an active component of various enzyme systems. It aids in the production and transfer of energy needed for the muscle cell's contraction. These processes are poorly understood and most of the clinical manifestations described are due to effects of extracellular changes in its concentration upon the enzymatic activity of the cell membrane. This ion initiates the excitation process and influences the condition of impulses. In its absence, the heart stops beating in systole. Normal cardiac function requires a ratio of sodium, potassium, and calcium of 100:4:2 in the interstitial fluids. Changes in these proportions cause conspicuous alterations in the electrocardiogram and heart function. An increased sodium or calcium can cause a normal tracing despite a hyperkalemia. On the other

hand, lower concentrations of the ion impair the muscular contractility of the heart. The flame photometer has simplified the determination of the concentration of serum potassium. Its normal range is 3.5 to 5 mEq/L. Abnormal electrocardiograms may appear when its level rises above 6.5 mEq/L or falls below 3 mEq/L. Both deficiency and excess of potassium may occur in diabetic ketosis; either can cause symptoms and signs of disturbed cardiac function.

Great amounts of potassium released into the plasma in diabetic ketosis are used in neutralizing the various acids; a relative deficiency usually occurs. Hyperkalemia may be produced, however, by renal impairment and by improper administration of potassium. Toxicity may occur with even moderately increased levels when sodium and calcium are depleted. Acidosis, because of its influence on these ions, simulates and enhances the electrocardiographic effects. Excess potassium does not weaken the myocardium. Its effect is upon myocardial irritability alone. It so disperses the fractional contractions of the individual fibers that their net effectiveness is reduced. In symptomatic hyperpotassemia bradycardia, ventricular extrasystoles and fibrillation with sinus arrest may occur. Congestive heart failure and changes in blood pressure are unusual. Tall, peaked T waves, absent P's, and broad slurred QRS complexes appear in the electrocardiogram of patients with hyperkalemia. The electrocardiogram is more useful in detecting excesses than deficiencies of potassium. Its value is limited by organic heart diseases in which similar ECG changes are seen. It especially helps in following the course of a toxic reaction after the diagnosis has been made by serum studies. Cardiac arrest, usually due to ventricular fibrillation, is the most common cause of death.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

HEART PAGE / Continued

Many factors in diabetic acidosis decrease the body's potassium and prevent its replacement. The most important precipitating cause is the dilution of blood with potassium-free intravenous fluids. Chronic pyelonephritis and intercapillary glomerulosclerosis, two common diabetic complications, increase the chances of developing hypokalemia. Also, the transfer of glucose across the cell membranes carries with it large quantities of this element. The signs and symptoms of hypopotassemia usually occur, therefore, four to eight hours after the beginning of treatment for ketosis. Shock with hypotension and cardiac dilation and arrest may occur. Heart failure is common due to impairment of myocardial contractions when the concentration of this substance is decreased. The electrocardiographic changes of hypopotassemia are: (1) Prolonged Q-T. interval, (2) Depression of S-T. segment with lowered or inverted T wave, and (3) Presence of broad U wave. Sometimes these tracings are equivocal, and serum studies should be used as an aid in making the diagnosis.

Coronary atherosclerosis is present in many diabetics. Myocardial infarction may be precipitated by the hypotension and the increased viscosity of the blood in severe dehydration. Its frequency is great enough to lead the physician to be always suspicious of its presence.

Summary

Shock in diabetic ketosis may produce such a decrease in coronary blood flow that myocardial ischemia and heart failure result. This circulatory stagnation and the increased viscosity of the blood due to dehydration predispose to coronary thrombosis in atherosclerotic diabetics. Changes in ionic concentration also disturb the function of the heart. Potassium is the element whose fluctuation is the most important in this respect. Both deficiency and excess of potassium cause characteristic, but not specific, electrocardiographic changes. The principal danger of hyperkalemia is ventricular fibrillation. Hypokalemia causes heart failure with central shock as its chief terminal manifestation.

HAL MCCLUNEY DAVISON

I BECAME ACQUAINTED with Hal Davison in 1929. We were at Grady Hospital, and he was in the department of medicine. As I recall him now, Hal was one of the most impressive of the younger internists on our staff (he had graduated in Medicine at the age of 24, full of vim and boundless vitality, and was an enthusiast about almost everything that one would expect to meet in an active medical career. He worked hard and played hard. I was so attracted to him and so completely charmed with his outward demeanor that I timidly approached him one day and asked if perhaps he might have a place in his office or practice where we could become associated. While gently turning me down, he made me feel that it was a terrific loss to be unable to find a spot for me. I was greatly flattered and pleased though disappointed.

Since 1929, Hal and I more or less grew up together, and although he was my senior in age by a few years, we worked and enjoyed ourselves often, especially at our favorite conventions, such as the Southern and the American Medical Association meetings, which we seldom missed. When time came to

by JACK C. NORRIS, *Atlanta*



Dr. Davison, left, on the occasion when he was given Honorary Life Membership in the Southern Medical Association by Dr. Norris.

return home, we were usually tired out, but Hal would be going just as strongly as ever. He was amazing!

As companions, if I be permitted to call it so, we often saw eye to eye in medical politics. It was a signal honor for me to follow him as President of the Fulton County Medical Society and to have served with Hal on the Board of Trustees and many committees. In committee work we both seemed to have stormy temperaments and strong opinions and at times would engage in the very hottest of arguments about problems that came before us. Some of those occasions almost brought forth fisticuffs. We would leave the meetings with more than disturbed conditions. Later on we would get together, laugh and forget that we had ever disagreed about anything; sometimes he would comment about something thoughtful I had done for him.

He could reach anger quickly, but even though he felt he had good reason to think some one had done him a bad turn, he was always willing and anxious to clear up the difference, to forgive and to forget. That manner, to my mind, goes along with a kind heart and the nobility of a sweet character which all of us would do well to emulate.

Dr. Davison, while as busy as a man could be, always found the time to engage in extramedical activities. I have never known of an instance when he refused to give his help to any important medical or public movement if he believed in it. If he did not believe in the proposition he had been approached to support, he would come out boldly and in strong fashion and let everyone know how he felt. Hal had no use for sham or deceit and would say nothing against a fellow physician that he would not say to his face. If I have any minor criticism of my good friend at all, it was my inability to see his viewpoint in some things or to understand just how he arrived at his decisions. That, I am sure, was due to my own incompetence in judging people. I never, however, felt that Hal was not on sound, reasonable ground in his conclusions.

As a physician, Hal was one of the best in the country. He had his own ideas about ethics, however. He would not treat a patient unless he was of the opinion that the person was actually suffering and that the diagnosis had established the need of therapy. Sometimes his bluntness and honesty in this regard made people angry, but they often later returned to him, and became ardent and trusting friends.

This tribute will not embrace the many honors and the amazing contributions Dr. Davison received or made to medical science during his life. Those will be recorded later. However, I may also state that Hal was a man with an extraordinary progressive viewpoint. He hesitated to stand backward and was anxious to go forward. If something new in medicine came to his attention, he quickly seized it and tried it. If the medical society wanted to expand, he was all for it. Likewise he gave liberally of his money. In fact, so liberal was Hal until I doubt that he left much of worldly value behind him except a splendid record, his character, and contributions to medicine. As an allergist he was among the first, having been a pioneer in this important practice. Patients came to Atlanta from all over the U. S. and abroad to get his opinions.

Hal Davison was a man who was versatile in his makeup. He was an enthusiast about horses, air travel, and sports, especially football. Above all he admired beautiful flowers and gardens, and he loved good music, especially the great operas. Among his friends and in social groups he was quite a charming personality.

As a father and brother he was loyal and devoted to his family. Anyone who knew it could never forget about his devotion to Uncle Peter, who shared his home for many years. I cannot recall any other occurrence in Hal's life which ever made him more completely happy than when Alexis became a physician following in his footsteps; yet he loved his older son Peter none the less, always feeling that a man had the right to choose his own vocation and to map his own career.

Hal was a loyal, strong admirer of his fellow physicians. In fact, he once said that his friendly relationship with his conferrers had constituted one of the most wonderful experiences in his life; he was grateful for the kindness and honors they had shown him. And to be sure he loved Georgia, loved Atlanta, and was proud to be a traditional Southerner.

As to his politics, I always thought he was a Democrat; but he wore no man's collar, and if he did not agree with democratic philosophy, he went the other way. On occasion, we were as far apart politically as the moon and sun.

Some may say that it would seem unnecessary to comment on the last days of my friend's life; better to leave those thoughts alone; yet we do write about them, not only from a sentimental standpoint, but as a matter of historic record. Like many others, I was shocked to hear that Hal was the victim of a cruel and incurable malady. However, after appropriate treatment, he appeared to gain fast, to look and act as well as he ever did. I was astounded at his recuperative ability. During that period he told me he never felt better but was well aware of the road ahead. "I shall go along and do the best I can as long as I can," he said, with a smile. If there were sad moments and crushing periods of depression, which he must have had, he kept all of it to himself, hidden in the recesses of a stout heart and steel mind, silently and away from sight. He seemed to have developed a philosophy of life that helped him meet the final day. I don't know anything about Hal's personal religion. We never discussed that.

When Hal was in the hospital the last time, he knew what was coming and what would probably happen. After all treatment had failed to lift him out of the depths, he called upon his friends to cease their efforts; thusly, the lights begin to dim, and Hal died April 26, 1958, age 67 years.

To my way of thinking at least, Hal's funeral was more impressive and beautiful than any I have ever attended. Perhaps, some one said, if Hal had been the one to plan it, it would have been somewhat different; yet I am sure that he appreciated all of those many friends who attended and who sent so many beautiful flowers, for Hal loved flowers, didn't he?

Hal would have loved, too, the beautiful music which expressed such moving sentiment. As long as I live I shall never forget Dr. Newton's magnificent tribute and the story which he related of how Hal had "hoped to

The Achievements of Arist

...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only $\frac{2}{3}$ that of prednisone¹... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*²...absence of serious side effects specifically noted.^{1,2,3}

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients⁴... 6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).⁵

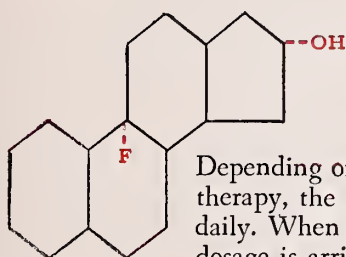
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2. Shelley, W. B., and Pillsbury, D. M.: Personal Communication.
3. Sherwood, A., and Cooke, R. A.: Personal Communication.
4. Freyberg, R. H., Berntsen, C. A., and Hellman, L.: Paper presented at International Congress on Rheumatic Diseases, Toronto, June 25, 1957.
5. Hartung, E. F.: Personal Communication.
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7. Sherwood, A., and Cooke, R. A.: J. Allergy 28:97, 1957.
8. Hellman, L., Zumoff, B., Kretshmer, N., and Kramer, B.: Paper presented at Nephrosis Conference, Bethesda, Md., Oct. 26, 1957.
9. Ibid.: Personal Communication.
10. Barach, A. L.: Personal Communication.
11. Segal, M. S.: Personal Communication.
12. Cooke, R. A.: Personal Communication.
13. Dubois, E. L.: Personal Communication.

ARISTOCORT[®]

Triamcinolone LEDERLE

...in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.⁶... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.⁷

...in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.^{8,9}... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.^{10,11,12}... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.¹³



Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about $\frac{1}{3}$ in rheumatoid arthritis, by $\frac{1}{3}$ in allergic rhinitis and bronchial asthma, and by $\frac{1}{3}$ to $\frac{1}{2}$ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.

SYDENSTRICKER WINS GOLDBERGER AWARD

DR. VIRGIL P. SYDENSTRICKER, professor emeritus of medicine at the Medical College of Georgia, has received the seventh Goldberger Award in clinical nutrition.

It was presented to him at the opening session of the House of Delegates of the American Medical Association during its annual meeting in San Francisco by Dr. David B. Allman, Atlantic City, N. J., President of the A.M.A.

The award, consisting of an engraved gold medal and \$1,000 is presented by the A.M.A. Council on Foods and Nutrition and is provided by the Nutrition Foundation, Inc.

In addition, Dr. Sydenstricker received a plaque when he delivered the Goldberger lecture at the general scientific session of the meeting.

The award is named for the late Dr. Joseph Goldberger who did pioneer work on pellagra in the southern states. The award was established to honor physicians who have made important contributions

to the knowledge of nutrition and to help stimulate research in the field.

Dr. Sydenstricker, who has done extensive research in hematology, the deficiency diseases caused by the lack of many vitamins, and malnutrition in general, received an award in 1938 from the Medical Association of Georgia for his work on pellagra.

During World War II, he worked with the British Ministry of Health, the United Nations Relief and Rehabilitation Administration, and the National Research Council on various nutritional problems. Since 1940, he has been consultant to the Army surgeon general.

He was a member of the original scientific advisory committee to the Nutrition Foundation when it was founded in 1941.

Formerly dean of postgraduate medical education at the Medical College of Georgia, Augusta, Dr. Sydenstricker is assistant chief of medical service at the Veterans Administration Hospital, Augusta.

1959 ANNUAL SESSION DATE SET:
MAY 17-20, 1959
BON AIR HOTEL
AUGUSTA, GA.

DAVISON / Continued

hold out until Peter came home, and until the roses bloomed again." Somewhere a Voice must have heard Hal, because Peter did get home, and the roses did bloom more beautifully than ever before.

Hal Davison will be missed from among us in the future of Atlanta's medicine, and he shall not soon be forgotten or replaced. I have never before known a man precisely like him. He was a grand friend, a good sport, and a superb physician, who stood among the highest of us professionally, and as a citizen.

Even though I have recounted so few of those many good points about Hal Davison, I am certain that he

shall long remain historically as one of Atlanta's and Georgia's outstanding doctors.

Finally, I wish to add that such a tribute as this one is most difficult to write as to adequately express one's deepest feelings. I realize well enough my inadequacy to do the superb job as I would like to have it. What I have written here has come from my heart; thus it is the best I can do. For all the good spirit Hal brought us; for the honors he received, and for the leadership he gave us—for all those things and a million more, we bless him and hope peace for him evermore.



the association

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Immediate Past President—W. Bruce Schaefer, Toccoa (1959)
First Vice-President—George H. Alexander, Forsyth (1959)
Second Vice-President—Charles W. Hock, Augusta (1959)
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Vice-Speaker of the House—Fred H. Simonton, Chickamauga (1959)

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Alternate—J. W. Chambers, LaGrange (1959)
Delegate—Eustace A. Allen, Atlanta (1960)
Alternate—Wm. R. Dancy, Savannah (1958)
Delegate—Spencer Kirkland, Atlanta (1958)
Alternate—Henry H. Tift, Macon (1958)

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- 1—Charles T. Brown, Guyton (1961)
- 2—George R. Dillinger, Thomasville (1961)
- 3—W. G. Elliott, Cuthbert (1961)
- 4—Virgil Williams, Griffin (1961)
- 5—J. G. McDaniel, Atlanta (1959)
- 6—Henry H. Tift, Macon (1959)
- 7—D. Lloyd Wood, Dalton (1959)
- 8—F. G. Eldridge, Valdosta (1959)
- 9—C. R. Andrews, Canton (1960)
- 10—Addison Simpson, Jr., Washington (1960)

Vice-Councilors

District

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- 2—J. Z. McDaniel, Albany (1961)
- 3—Willis P. Jordan, Columbus (1959)
- 4—George P. Kinnard, Newnan (1961)
- 5—Charles S. Jones, Atlanta (1959)
- 6—George H. Alexander, Forsyth (1959)
- 7—Ralph W. Fowler, Marietta (1959)
- 8—James M. Hicks, Brunswick (1959)
- 9—Paul T. Scoggins, Commerce (1960)
- 10—David R. Thomas, Jr., Augusta (1960)

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Luther Wolff, Columbus, *President-Elect*
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Chris J. McLoughlin, Atlanta, *Secretary-Treasurer*
George R. Dillinger, Thomasville, *Chairman of Council*
J. G. McDaniel, Atlanta, *Chairman of Finance*

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J. W. Chambers, LaGrange
Thomas W. Goodwin, Augusta

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Robert L. Brown, Emory University
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Albert M. Deal, Statesboro.

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Maurice F. Arnold, Hawkinsville
George T. Nicholson, Cornelia

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Charles T. Cowart, LaGrange
John B. O'Neal, Elberton

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Stewart D. Brown, Jr., Royston
Darrell Ayer, Atlanta
Lester Rumble, Atlanta
George Schuessler, Columbus
R. B. Martin, Cuthbert.

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Lee Howard Sr., Savannah
George R. Dillinger, Thomasville
W. Bruce Schaefer, Toccoa
J. G. McDaniel, Atlanta
Luther Wolff, Columbus

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Chris J. McLoughlin, Atlanta, *Chairman*
Rafe Banks, Gainesville
T. A. Sappington, Thomaston

Clarkesville Laboratory School

D. Lloyd Wood, Dalton, *Chairman*
Hamil Murray, Gainesville
Lee Howard, Jr., Savannah
Robert E. Ridgway, Royston
James A. Green, Athens

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Henry H. Tift, Macon, *Chairman*
Peter Hydrick, College Park,
Commercial Exhibits
Ted F. Leigh, Emory University,
Scientific Exhibits and Meeting Rooms
C. Raymond Arp, Atlanta, *Banquet*
Simone Brocato, Columbus,
Glennville Giddings, Atlanta,
Lectureship
Floyd W. McRae, Atlanta, *Lectureship*
Murdock Equen, Atlanta, *Lectureship*

Unauthorized Practice of Medicine By Ancillary Personnel

A. M. Phillips, Macon, *Chairman*
Ralph W. Fowler, Marietta
W. L. Pomeroy, Waycross.

STANDING COMMITTEES

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Everett L. Bishop, Atlanta, *Chairman*
 Hoke Wammock, Augusta
 J. E. Scarborough, Emory University
 David Henry Poer, Atlanta (1960)
 R. C. Pendergrass, Americus
 Enoch Callaway, LaGrange, *ex-officio*
 Wray J. Tomlinson, Columbus
 John L. Barner, Athens
 F. G. Eldridge, Valdosta
 Lester Harbin, Rome
 Thomas Harrold, Macon
 M. Fernan Nunez, Dublin
 Robert L. Brown, Emory University
 Neal F. Yeomans, Waycross
 Julian B. Neel, Thomasville
 Major F. Fowler, Atlanta
 Wadley R. Glenn, Atlanta
 John T. Mauldin, Atlanta
 P. F. Brown, Jr., Gainesville

Crawford W. Long Memorial

Lester Rumble, Jr., Atlanta,
Chairman (1961)
 P. P. Volpitta, Augusta (1960)
 A. B. Boyd, Athens (1959)

Constitution & By-Laws

Thomas W. Goodwin, Augusta
Chairman (1961)
 William P. Harbin, Rome (1959)
 Eustace A. Allen, Atlanta (1960)

Geriatrics

Harry Brill, Columbus,
Chairman (1961)
 Edgar Woody, Jr., Atlanta (1960)
 Milton F. Bryant, Atlanta (1959)

History & Vital Statistics

Carl C. Aven, Marietta,
Chairman (1960)
 Morgan Raiford, Atlanta (1959)
 Herbert Alden, Atlanta (1961)
 Edgar Woody, Jr., Atlanta, *ex-officio*
 R. H. McDonald, Newnan, *ex-officio*

Hospital Relations

Milford B. Hatcher, Macon,
Chairman (1961)
 David Henry Poer, Atlanta,
Co-Chairman (1960)
 Kirk Shepard, Thomasville (1959)
 Robert B. Martin, Cuthbert (1961)
 Herbert D. Tyler, Thomaston (1960)
 H. A. Goodwin, Summerville (1959)
 James R. Paulk, Moultrie (1961)
 Rafe Banks, Gainesville (1960)
 A. W. Simpson, Jr., Washington (1959)
 Walter Brown, Savannah (1961)
 J. Miller Byne, Waynesboro (1960)
 Fred H. Simonton, Chickamauga (1959)
 W. L. Pomeroy, Waycross, (1961)
 H. C. Derrick, Jr., Lafayette (1960)
 P. W. Warg, Athens (1959)
 Henry H. Tift, Macon (1961)
 Frank G. Eldridge, Valdosta (1960)
 A. B. Conger, Columbus (1959)

Industrial Health

T. A. Peterson, Savannah,
Chairman (1960)
 Joe M. Bosworth, Atlanta (1960)
 Allen M. Collinsworth, Atlanta (1959)
 Alex Jones, Griffin (1961)

Insurance & Economics

David R. Thomas, Augusta,
Chairman
 1—John L. Elliott, Savannah (1960)
 2—Rudolph F. Bell, Thomasville
 (1959)
 3—Luther H. Wolff, Columbus (1961)
 4—Thomas E. Floyd, Griffin (1960)
 5—Charles S. Jones, Atlanta,
Co-Chairman (1959)
 6—Herbert M. Olnick, Macon (1961)
 7—E. S. Marks, Marietta (1960)
 8—W. L. Pomeroy, Waycross (1959)
 9—W. P. Nicolson, III, Gainesville
 (1961)
 10—David R. Thomas, Jr., Augusta
 (1961)

Legislation

J. Frank Walker, Atlanta,
Chairman (1960)
 E. A. Allen, Atlanta,
Vice-Chairman (1959)
 Albert M. Deal, Statesboro (1959)
 Virgil B. Williams, Griffin (1961)
 T. A. Peterson, Savannah (1961)

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Chairman (1961)
 H. J. Bickerstaff, Columbus (1960)
 Eugene L. Griffin, Atlanta (1959)
 Helen W. Bellhouse, Atlanta (1961)
 James W. Bennett, Augusta (1960)
 Peter Hydrick, College Park (1960)
 A. G. LeRoy, Thomson (1959)
 Frank McKemie, Albany (1961)

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Chairman (1961)
 W. Bruce Schaefer, Toccoa (1959)
 Henry Finch, Atlanta (1963)
 C. J. McLoughlin, Atlanta, *ex-officio*
 J. G. McDaniel, Atlanta, *ex-officio*

Medical Education

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 J. C. Metts, Savannah (1961)
 Harry B. O'Rear, Augusta, *ex-officio*
 A. P. Richardson, Atlanta, *ex-officio*

Mental Health

Rives Chalmers, Atlanta,
Chairman (1959)
 J. R. Shannon Mays, Macon (1960)
 R. J. Van de Wetering, Atlanta (1961)
 Arthur M. Knight, Jr., Waycross (1959)
 Paul T. Scoggins, Commerce (1960)
 Albert J. Kelley, Savannah (1961)
 T. J. Vansant, Jr., Marietta (1959)
 Richard E. Felder, Atlanta (1960)
 H. E. Valentine, Jr., Gainesville (1961)
 T. G. Peacock, Milledgeville, *Consultant*
 Guy V. Rice, Atlanta, *Consultant*

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 Wm. P. Harbin, Jr., Rome
 H. Dawson Allen, Milledgeville
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Public Health

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Chairman (1959)
 Walter Brown, Savannah (1960)
 J. B. Neighbors, Athens (1960)
 Alex G. Little, Valdosta (1961)
 Lee Battle, Jr., Rome (1961)
 John Venable, Atlanta, *ex-officio*

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Chairman (1961)
 E. P. Inglis, Marietta (1960)
 Albert M. Boozer, Dalton (1959)
 E. C. McMillan, Macon (1961)
 Peter L. Scardino, Savannah (1960)
 A. H. Letton, Atlanta (1959)
 Clarence C. Butler, Columbus (1959)
 Charles W. Hock, Augusta (1961)
 I. R. Berger, Athens (1959)
 Frank McKemie, Albany (1960)

Rural Health

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 1—Katrine Hawkins, Sylvania (1960)
 2—Carl Pittman, Jr., Tifton (1960)
 3—Charles McArthur, Cordele (1959)
 4—T. A. Sappington, Thomaston
 (1961)
 5—Albert L. Morris, Fairburn (1960)
 6—H. R. Cary, Milledgeville (1959)
 7—H. C. Derrick, Lafayette (1961)
 8—J. W. Yeomans, Jesup (1960)
 9—Rafe Banks, Gainesville (1961)
 10—Hugh B. Cason, Warrenton (1959)

Scientific Exhibit Awards

Ted F. Leigh, Emory University,
Chairman (1960)
 Hoke Wammock, Augusta (1959)
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Chairman (1959)
 Lee Howard, Jr., Savannah (1960)
 Hartwell Joiner, Gainesville (1961)

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Chairman (1961)
 W. G. Elliott, Cuthbert (1960)
 W. Bruce Schaefer, Toccoa (1959)

SPECIAL COMMITTEES (Appointed Annually)

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Ruskin King, Savannah
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W. E. Storey, Columbus
John Ridley, Atlanta

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Robert A. Sears, Atlanta
J. W. Bennett, Augusta
W. G. Elliott, Cuthbert
W. U. Clary, Savannah
Fred E. Murphy, Jr., Thomasville
Charles E. Irwin, Atlanta

Eyecare of the Newborn

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Joseph L. Girardeau, Atlanta
C. A. N. Rankine, Atlanta

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John L. Elliott, Savannah
Virgil B. Williams, Griffin

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M. D. Pittard, Toccoa
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Oliver T. Ghent, Gainesville
R. C. Pendergrass, Americus

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C. J. Wyatt, Jr., Rome
Thomas C. McPherson, Atlanta
Lamar F. Glass, Atlanta
August S. Yochem, Jr., Atlanta
Jule C. Neal, Jr., Macon
E. P. Inglis, Marietta

EXECUTIVE COMMITTEE MEETING, JUNE 1

THE Executive Committee of the Council of the Medical Association of Georgia was called to order by Chairman George R. Dillinger at 11:10 a.m., Sunday, June 1, 1958 in the Academy of Medicine, Atlanta.

Members of the Executive Committee present included: Lee Howard, Sr., Savannah, President; Luther H. Wolff, Columbus, President-Elect; W. Bruce Schaefer, Toccoa, Immediate Past President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; George R. Dillinger, Thomasville, Council Chairman and J. G. McDaniel, Atlanta, Council Finance Committee Chairman. Also present were J. Frank Walker, Atlanta, Association Legislative Committee Chairman and Charles S. Jones, Atlanta, Medicare Review Board Chairman. Messrs. M. D. Krueger, John F. Kiser, and John D. Arndt of Headquarters Staff were present.

The Council Meeting Minutes of April 26, 1958, and April 30, 1958, were reviewed and accepted.

Department of Defense Medicare Advisory Committee Meeting

Charles S. Jones, Medicare Review Chairman, reported on the meeting of the Medicare Advisory Committee to the Department of Defense held May 9, 1958, Washington, D. C., at which meeting Dr. Jones represented the Medical Association of Georgia along with Mr. John D. Arndt, MAG Medicare Administrator.

Dr. Jones reviewed the meeting in which the Association presented reasons for changing the present Medicare plan from "full service" to an "indemnity type plan." Dr. Jones stated that the objections raised

at this meeting to the Association-proposed indemnity type Medicare plan were (1) Impossible to administer by the government; (2) The military planners are committed to the philosophy of full service fee schedule, and (3) That it would give physicians a government blank check. Dr. Jones then refuted these objections at this meeting and was told the Committee would take under consideration the Association proposal.

Dr. Jones then read the action of the Department of Defense Dependents Medical Care Advisory Committee on the proposed Association indemnity type plan as follows:

"The Committee is deeply appreciative of the presentation made by the representatives of Georgia and Rhode Island Medical Associations sponsoring indemnity plans.

Many members were unable to remain until the proposed resolution could be discussed. Those remaining felt that much more detailed study is required before a recommendation could be made on this important subject.

It is therefore resolved that more detailed investigations be conducted concerning the applicability of indemnity type plans to the program and that this subject be made a primary one for the next meeting of the Advisory Committee."

Dr. Jones then recommended Association liaison on this matter with Congress to present the Association point of view. It was voted that the MAG liaison with Congress on this matter be referred to the Legislative Committee for action with Dr. Jones' aid and advice.

It was voted that a written report of this D.O.D. Medicare Advisory Committee meeting be written by Dr. Jones and be sent to the members of Executive Committee for a postcard vote of approval and then be sent to each member of the AMA House of Delegates signed by the Association Secretary-Treasurer, Chris J. McLoughlin and that these be mailed before the AMA San Francisco meeting, June 23, 1958. The motion also included instructions to the MAG Delegates to work closely with Rhode Island at the San Francisco meeting on the matter of a resolution supporting an indemnity type Medicare program.

AMA Legal Conference Meeting

J. Frank Walker presented a report of the AMA Legal Conference Meeting, May 9-10, 1958 held in Chicago at which time Mr. John Dunaway, Association Attorney, and Mr. John F. Kiser, Associate Executive Secretary, represented the Association. Dr. Walker's report covered the following subjects: "Third Party Medicine"; "Legal Aspects of Membership in County Medical Societies"; Medical Professional Liability"; "Legislative and Lobbying practices of State Medical Societies" and "Tax Advantages of Corporations and Unincorporated Associations." This report was accepted for information.

Chairman Dillinger then recessed the Executive Committee of Council meeting which was reconvened and called to order by Chairman Dillinger at 3:30 p.m.

Council Finance Chairman Committee Report

J. G. McDaniel, Chairman of the Council Finance Committee reported on the 1958 Annual Session income and expenditures, and this report was accepted.

Dr. McDaniel then reported on the Association monthly budget, and this report was accepted. It was voted to pay the Association attorney on a monthly basis, in advance, rather than bi-annually; this monthly payment at the beginning of each month to be effective July 1.

Dr. McDaniel then presented the statement from the Student American Medical Association representative at the Medical College of Georgia in the amount of \$140 to cover said representative's expenses in attendance at the Student American Medical Association Convention, Chicago, April 30-May 4, 1958, as recommended by MAG House of Delegates action. Dr. McDaniel stated that funds were available to meet such expenses, and it was approved that \$140 be appropriated from the contingent fund for this purpose.

Standing Committee Appointments

Chairman Dillinger then called for certain appointments of Standing Committee members necessary because of resignation or refusal to serve as previously appointed. The following appointments were made:

Cancer Committee—M. Fernan Numez, Dublin, replacing Lee Howard, Sr., Savannah; *History and Vital Statistics*—Carl C. Aven, Marietta, appointed Chairman replacing J. Calvin Weaver, Atlanta, and Herbert S. Alden, Atlanta, also appointed; *Maternal and Infant Welfare Committee*—A. G. LeRoy, Thomson, appointed to replace George H. Alexander, Forsyth; *Professional Conduct Committee*—W. F. Reavis, Waycross, appointed Chairman as senior man on the committee filling the vacancy of Hal M. Davison; *Public Service Committee*—I. R. Berger, Athens, replacing J. B. Neighbors, Athens; *Rural Health Committee*—Albert L. Morris, Fairburn, appointed Chairman.

Special Committees

President Lee Howard, Sr., appointed the following Special Committees which are appointed annually by the President:

Blood Banks—Lester Forbes, Atlanta, Chairman; Lee Howard, Jr., Savannah; Walter L. Shepeard, Augusta; Hamil Murray, Gainesville; F. H. Thompson, Albany; Frank Lewis Beckel, Columbus; Joseph A. Hertell, Atlanta.

School Child Health—Thomas C. McPherson, Atlanta, Chairman; Edwin C. Shepard, Savannah; M. D. Pittard, Toccoa; Virginia McNamara, Atlanta; Maurice F. Arnold, Hawkinsville.

Crippled Children—J. C. Hughston, Columbus, Chairman; F. James Funk, Jr., Atlanta; John J. Chandler, Jr., Atlanta; H. W. Muecke, Waycross; Robert A. Sears, Atlanta; J. W. Bennett, Augusta; W. G. Elliott, Cuthbert; W. U. Clary, Savannah; Fred E. Murphy, Jr., Thomasville; Charles E. Irwin, Atlanta.

Medical Civil Preparedness—Edgar M. Dunstan, Atlanta, Chairman; Lee Battle, Rome; Perry P. Volpitta, Augusta; J. Fletcher Hanson, Macon; T. J. Ferrell, Waycross; Joseph S. Skobba, Atlanta; Charles E. Dowman, Atlanta; George M. Hutto, Columbus; John L. Elliott, Savannah; Virgil B. Williams, Griffin.

Ministerial Liaison—Needham B. Bateman, Atlanta, Chairman; Avery M. Dimmock, Atlanta; Marion A. Hubert, Athens; Edward Y. Walker, Milledgeville; F. G. Eldridge, Valdosta.

VFW Liaison—W. Bruce Schaefer, Toccoa, Chairman; Charles R. Andrews, Canton; Chris J. McLoughlin, Atlanta.

American Medical Education Foundation—George T. Nicholson, Cornelia, Chairman; J. Hubert Milford, Hartwell; Ruskin King, Savannah; H. Ansley Seaman, Waycross; W. E. Storey, Columbus; John Ridley, Atlanta.

Eyecare of the Newborn—J. Jack Stokes, Atlanta, Chairman; Thomas C. McPherson, Atlanta; Joseph L. Girardeau, Atlanta; C. A. N. Rankine, Atlanta.

Radiologic Safety—Robert M. Tankesley, Atlanta, Chairman; F. G. Eldridge, Valdosta; Enoch Callaway, LaGrange; Oliver T. Ghent, Gainesville; R. C. Pendergrass, Americus.

Council Committees

The following Committees of Council were then appointed:

Committee Reorganization—W. G. Elliott, Cuthbert, Chairman; J. W. Chambers, LaGrange; Thomas W. Goodwin, Augusta.

Cultists Committee—F. G. Eldridge, Valdosta, Chairman; J. W. Chambers, LaGrange; Thomas W. Goodwin, Augusta.

Councilor Appointment and Redistricting—Thomas W. Goodwin, Augusta, Chairman; Maurice F. Arnold, Hawkinsville; George T. Nicholson, Cornelia.

Standardization of Insurance Forms — Joseph B. Mercer, Brunswick, Chairman; W. L. Pomeroy, Waycross; Robert E. Shiflet, Toccoa; Charles T. Cowart, LaGrange; John B. O'Neal, Elberton.

Institution-Physician Relations—F. G. Eldridge, Valdosta, Chairman; Stewart D. Brown, Jr., Royston; Darrell Ayer, Atlanta; Lester Rumble, Atlanta; George Schuessler, Columbus; R. B. Martin, Cuthbert.

Headquarters Building Committee — Chris J. McLoughlin, Atlanta, Chairman; Lee Howard, Sr., Savannah; George R. Dillinger, Thomasville; W. Bruce Schaefer, Toccoa; J. G. McDaniel, Atlanta; Luther H. Wolff, Columbus.

Annual Session Committee—Henry H. Tift, Macon, Chairman; Peter Hydrick, College Park, Commercial Exhibits; Ted F. Leigh, Emory University, Scientific Exhibits and Meeting Rooms; C. Raymond Arp, Atlanta, Banquet; Simone Brocato, Columbus; Glenville Giddings, Atlanta, Lectureship; Floyd W. McRae, Atlanta, Lectureship.

Unauthorized Practice of Medicine by Ancillary Personnel—A. M. Phillips, Macon, Chairman; Ralph W. Fowler, Marietta; W. L. Pomeroy, Waycross.

Medical School Course—Chris J. McLoughlin, Atlanta, Chairman; Rafe Banks, Gainesville; and a third committeeman to be chosen by the Chairman.

Review of 1958 House of Delegates Action

Chairman George Dillinger then reviewed those actions referred to Council by the 1958 MAG House of Delegates.

(1) *MAG Members Retirement Fund*—The House of Delegates accepted a resolution on a retirement fund for MAG members and requested that the Council of the Medical Association of Georgia investigate this important matter and take such action as it deems necessary. It was voted to refer this matter to the Association Insurance and Economics Committee and request an investigation and a report of this investigation to the Council at the earliest date possible.

(2) *Physician-Lawyer Liaison* — The House of Delegates recommended that the interprofessional code between the Medical Association and the Georgia Bar Association be approved and that a copy of the code be sent to every member of the MAG with the request that it be studied and followed. It was voted to print and distribute by mail this code to the membership as soon as it is approved by the Georgia Bar Association. The House of Delegates also recommended that a joint Medical Association-Bar Association Committee be formed, and it was voted to appoint W. L. Pomeroy, Waycross; W. Bruce Schaefer, Toccoa; and Charles S. Jones, Atlanta, to this "Joint Medical-Legal" Committee.

(3) *Georgia Plan Participation*—The House of Delegates recommended that the Association members be urged to participate in the Georgia Plan, and it was voted that a mailing to the County Society Secretaries be instituted late in August 1958 so that the County

Societies may urge its members to participate in the Association Georgia Plan. It was also voted per the House of Delegates action to request the Councilor of the Third District to have a preliminary talk with the physician who allegedly transmitted certain information from the Insurance and Economics Committee to the Insurance Committee of the state of Georgia, thereby impeding the work of this Association Committee. It was further requested that the Councilor report to the Council at the September Council meeting.

(4) *Nursing Home Standards*—The House of Delegates requested that the Council set standards for Georgia nursing homes, and it was voted to request the Association Geriatrics Committee to compose such standards and submit them to Council for approval.

(5) *Weekly Health Column*—The House of Delegates recommended that the weekly health columns now being published in weekly newspapers in Georgia be guided by a Special Association committee, and by general agreement a Weekly Health Column Special Committee was appointed as follows: H. C. Derrick, Jr., LaFayette, Chairman; C. J. Wyatt, Jr., Rome; Thomas C. McPherson, Atlanta; Lamar F. Glass, Atlanta; August S. Yochem, Jr., Atlanta; Jule C. Neal, Jr., Macon; and E. P. Inglis, Marietta.

(6) *Clarksville Laboratory School*—The House of Delegates requested that the Council appoint a committee for a continuing study and evaluation of the Laboratory School and Practical Nursing School in Clarksville, and by general agreement the following appointments were made to the Clarksville Laboratory School Committee of Council: D. Lloyd Wood, Dalton, Chairman; Hamil Murray, Gainesville; Lee Howard, Jr., Savannah; Robert E. Ridgway, Royston; and James Green, Athens.

(7) *Medical Education Week*—The House of Delegates requested that a committee be appointed to handle medical education week in the state of Georgia, and it was voted to refer this to the MAG Standing Committee on Medical Education.

(8) *Crawford W. Long Memorial Museum Maintenance*—The House of Delegates requested that the Association allow sufficient funds to maintain the Crawford W. Long Memorial Museum through the month of September 1958, and it was voted to refer this matter to the Council as the Council is responsible for the allocation of Association funds.

(9) *Hospital-Medical Mediation Council* — The House of Delegates recommended that the composition of this Committee be left to the discretion of Council, and it was voted to reaffirm the earlier action of Council concerning the composition of this Mediation Council as follows: two members from the Georgia Hospital Association; two members from the Medical Association of Georgia; two members from the Georgia Association of Hospital Governing Boards; one member Georgia Chapter, American College of Surgeons; one member Georgia Academy of General Practice; one member Georgia Department of Public Health; one member from the Specialties of Radiology, Pathology or Anesthesiology chosen by this Mediation Council itself, and one member from the Georgia Hospital Administrator Association. Following this action it was voted that Milford Hatcher, Macon, and Mark

S. Dougherty, Atlanta, be appointed as the two representatives on this Mediation Council from the Medical Association of Georgia.

(10) *1960 MAG Annual Session Date*—The House of Delegates recommended that the Association set the time of its Annual Session two years in advance, and this matter was referred to the Council for action.

1959 Annual Session Meeting Date

It was voted to convene the *105th Annual Session of the Medical Association of Georgia, May 17-20, 1959, in Augusta, Georgia.

Headquarters Office Report

Mr. Krueger reported on the activity of the Headquarters Office during the month of May and the proposed activity for the month of June. His report was accepted for information. Mr. John Arndt, Medicare Administrator, then reported on the present status of the Medicare program and certain refund problems were referred to the Medicare Review Board with the Executive Committee recommendation that certain physicians be suspended from participation in the Medicare program unless refunds from said physicians were forthcoming.

Unfinished Business

Mr. Krueger reported that the Veterans Administration had not made the proposed changes in the MAG-VA Fee Schedule Contract, and that according to prior Council action the Association could not renew the contract until such proposals were granted. Mr. Krueger stated that the present contract expires June 30, and that as the Association cannot renew this contract, the expiration of the contract should be explained to the membership. It was voted to inform the membership of the expiration of the contract through the medium of the *Journal of the Medical Association of Georgia*.

New Business

The matter of a pharmaceutical firm seeking to advertise in the *Journal of the Medical Association of Georgia* was discussed and referred to Edgar Woody, Jr., Editor of the *Journal* for action.

There being no further business the meeting was adjourned at 5:00 p.m.

ANNOUNCEMENTS

Annual Postgraduate Obstetric—Pediatric Seminar, September 8-10, 1958, Daytona Beach, Florida. Nine lectures; three question and answer periods. Outstanding speakers act as panel members. AAGP Approved 15 hours, category I. For further information write the State of Georgia Department of Public Health, Atlanta.

Course in Cardiac Resuscitation—October 3, 1958, Emory University School of Medicine, Atlanta. Visiting lecturers include Dr. Paul Zoll, Beth Israel Hospital, Boston, Mass. and Dr. David S. Leighninger, Lakeside Hospital, Cleveland, Ohio. For complete details write Postgraduate Education, Emory University School of Medicine, 69 Butler Street, S.E., Atlanta 3, Ga.

Second Annual Postgraduate Course on Prevention and Management of Athletic Injuries, August 25-27, 1958; Sponsored by the Division of Orthopedic Surgery and the Office of Postgraduate Medical Education, the University of Colorado Medical Center, Denver. Course offers a broad and intensive review of present day concepts of the prevention and management of athletic injuries. Lectures, panel discussions, and demonstrations will be utilized and time provided for discussion. Registration fee, \$5.00; tuition fee, \$30.00. AAGP Credit, 24 hours, category I. Write Office of Postgraduate Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver 20, Colorado.

First Annual Meeting, Medical Progress Assembly, September 7-9, 1958, Birmingham, Alabama. Sixteen of the country's outstanding medical authorities will appear on the scientific program. Assembly is sponsored by the Birmingham Academy of Medicine. Contact Buford Word, M.D., General Chairman, Medical Progress Assembly, 2205 Highland Avenue, Birmingham 5, Alabama.

Academy of Psychosomatic Medicine, Fifth Annual Meeting, October 9-11, Park Sheraton Hotel, New York City. Program will be devoted to "The Psychosomatic Aspects of Internal Medicine" and will include formal papers, panel discussions, and luncheon conferences. Information may be obtained from Dr. Bertram B. Moss, Suite 1035, 55 East Washington Street, Chicago 2, Illinois.

Urology Award—Sponsored by the American Urological Association. Annual award of \$10,000 (first prize, \$500; second prize, \$300; third prize, \$200) for essays on the result of some clinical or laboratory research in urology. Limited to urologists who have been graduated not more than ten years and to hospital interns and residents doing research work in urology. Deadline is December 1, 1958. First prize essay will appear on the program of the forthcoming meeting of the American Urological Association to be held in Atlantic City, April 20-23, 1959. For complete information write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland.

DEATHS

O. D. KING, Bremen, died May 15 at the age of 59. Born in Martin, Georgia, Dr. King received his medical degree from Emory University School of Medicine. He served his internship at Knickerbocker Hospital and Lenox Hill Hospital, New York City, and his residency at Lenox Hill Private Pavillion.

Dr. King was a member of the Bremen Hospital Authority, the Carroll-Douglas-Haralson Medical Association, the Medical Association of Georgia, and the American Medical Association.

Active in civic affairs, he was a charter member of the Bremen Lions Club and was chairman of the committee to build and operate the Bremen Recreation Center. He was a member of the Bremen Masonic Lodge No. 456, F.&A.M., a sponsor of Little League baseball in Bremen, and a member of the First Methodist Church where he was on the Board of Stewards, the finance committee, the pulpit committee, and a member of the Methodist Men's Club.

Surviving are his wife, the former Peggy Donkel; one son, Freddie King, Bremen; five sisters and three brothers.

HENRY MIDDLETON MICHEL, Augusta, died May 25 at the age of 82.

A native of Charleston, S. C., Dr. Michel received his medical education at the University of South Carolina Medical College in Charleston and the Medical College of Georgia in Augusta. After postgraduate study in New York, London, and Paris, he returned to Augusta, where he practiced until retirement in 1945.

Dr. Michel was one of the pioneer orthopedists in Georgia. He was elected to fellowship in the American College of Surgeons in 1918. He was professor of orthopedic surgery at the Medical College of Georgia from 1907 to 1945 except during a period in World War I, when he served as a major in the French Army, commanding the French Hospital at Lyons. Later, he was transferred to the American Army and commanded a U. S. Army hospital in France.

He is survived by one daughter, Mrs. A. H. Payne of West Newton, Massachusetts; two grandsons, Stephen Hampton Payne and Thomas Michel Payne; one niece and one nephew.

RALPH G. NEWTON, 60, of Macon, died of a heart attack, June 5.

After having attended Mercer University at Macon, he received his medical degree from Emory University Medical School. He interned at Atlanta's Piedmont Hospital.

He was a member of the American College of Surgeons, the Southeastern College of Surgeons, and the Southern Medical Society. He was past president of the Bibb County Medical Society and past president of the staffs of Macon Hospital and Parkview Hospital.

Dr. Newton was a member of the Ingleside Baptist Church, where he served on the board of deacons.

Survivors include his wife, the former Miss Irma Clark; two sons, Dr. R. G. Newton, Jr., of Macon, and Dr. Milledge C. Newton, U. S. Navy, Formosa; two brothers, Dr. Louie D. Newton, pastor of Druid Hills Baptist Church in Atlanta, and W. J. Newton of Screven County; a sister, Mrs. J. A. Reiser, Metter; and two grandchildren.

SOCIETIES

Reece C. Eberhardt, Macon, arranged the program for the June meeting of the **BIBB COUNTY MEDICAL SOCIETY**, which was a discussion of Blue Shield Insurance. The program was presented by representatives of the Georgia Hospital Service Association from Columbus. At a previous meeting, A. Calhoun Witham, Augusta, gave a paper entitled, "Auscultation of the Heart."

Walter L. Bloom, of Atlanta, was guest speaker at a recent meeting of the **LAURENS COUNTY MEDICAL SOCIETY**. Two other out of town physicians who were special guests at the dinner were A. J. Yates, Jr., of Soperton, and Frank R. Robbins, of Vidalia.

The **MUSCOGEE MEDICAL SOCIETY** joined with the Muscogee County Health Department, and the Muscogee-Chattahoochee Chapter of the National Foundation for Infantile Paralysis to promote a "Dollar Day for Salk Vaccine" in Columbus. The purpose of the campaign was to get every person under the age of 40 inoculated.

The **THOMAS-BROOKS MEDICAL ASSOCIATION** held its quarterly meeting at the Archibold Memorial Hospital in Thomasville in June. Louis A. Hazouri, Columbus, spoke on "Craniospinal Injuries," and Simone Brocato, Columbus, spoke on "Diagnosis of Pericardial Effusion."

The members of the **UPSON COUNTY MEDICAL SOCIETY** entertained its Auxiliary with a steak supper at the Thomaston Country Club in recognition of the honors won by the Auxiliary at the state Convention.

PERSONALS

First District

KATHRYN S. LOVETT, Statesboro, psychiatric consultant, and **HUBERT KING**, Statesboro, medical director of the District Seven Health Department, attended a meeting in Athens recently of state mental health workers. Both Dr. Lovett and Dr. King appeared on the program to discuss the proposed mental health program for Health District Seven.

GABRIEL D'AMATO, Savannah, was the guest speaker at the 140th Annual Meeting of the Family Service Association, Columbia, South Carolina. Dr. d'Amato spoke on "Family Organization in the Trustee, Domestic, and Atomistic Periods."

Second District

J. WALTER SMITH, formerly of Arlington, has recently moved to Bainbridge where he has begun the practice of general medicine. Dr. Smith is occupying offices in the Riverside Hospital and Clinic formerly occupied by T. E. DUPREE. Before going to Bainbridge, Dr. Smith was affiliated with Oschner Hospital, Arlington.

Third District

ROBERT A. COLLINS, JR., Americus, has been awarded a Certificate of Certification by the American Board of Surgery.

BERT TILLERY, Columbus, has announced his return to practice, with offices in the Medical Arts Building.

Fourth District

Attending the Atlantic Coastline Surgeon's Convention in Nassau recently were DR. AND MRS. CALVIN JACKSON and DR. AND MRS. J. W. SMITH, JR., of Manchester.

Fifth District

BRIT B. GAY, Emory University, attended the annual meeting of the Association of University Radiologists held at Johns Hopkins where he presented a paper on "Pulmonary Artery Pulsations in Relation to Blood Flow and Pressure in the Pulmonary Circulation."

JAMES T. KING, Atlanta, recently attended the meeting of the American Laryngological, Rhinological, and Otological Society held in San Francisco. Dr. King was accompanied by his wife. Also attending this meeting were LESTER A. BROWN, GEORGE S. ROACH, JR., and MURDOCK EQUEN, of Atlanta.

JOHN R. LEWIS, JR., Atlanta, was recently the recipient of the Young Poet's Prize offered by *Lyric Magazine* for the year 1957.

BERNARD S. LIPMAN, Atlanta, attended the American College of Cardiology meeting in St. Louis where he was inducted as a fellow of the college.

Sixth District

G. H. ALEXANDER and LUMPKIN H. COFFEE, Forsyth, held open house recently in their new office building on Medical Court adjoining the Monroe County Hospital.

ROBERT A. CLARK, JR., Macon, has recently been certified by the American Board of Neurological Surgery.

W. P. ROCHE, JR., Dublin, was elected to an associate membership in the American College of Physicians at a recent meeting of the group in Atlantic City.

Eighth District

R. ROY McCOLLUM, Kingsland, has announced that H. H. Robinson is now associated with him in the practice of medicine.

At a recent meeting of the Valdosta Jaycettes, W. C. RETTERBUSH, Valdosta, gave a talk on breast cancer.

WARREN S. WALLACE, Brunswick, has resigned as Brunswick city physician. Dr. Warren has served in that position for the past two years.

Ninth District

PAUL H. WILSON, formerly of Baxley, has moved to Cumming, where he will practice in association with RUPERT H. BRAMBLETT.

Tenth District

RUFUS F. PAYNE, Augusta, addressed the meeting of the National Tuberculosis Association in Philadelphia. Dr. Payne's topic was "Drug Prophylaxis in Tuberculosis Control."

CALENDAR OF MEETINGS

<i>Society</i>	<i>Date</i>
<i>Chatooga County</i> , Summerville, H. A. Goodwin, Secretary	Augusta 1
<i>Cobb County</i> , Kennestone Hospital, Marietta, Hugh Colquitt, Secretary	August 5
<i>Colquitt County</i> , Moultrie, James T. Flynn, Secretary	August 12
<i>Emanuel County</i> , Emanuel County Hospital, Swainsboro, H. W. Smith, Secretary	August 5
<i>Flint County</i> , Crisp County Hospital, Cordele, Joseph Christmas, Secretary	August 5
<i>Fulton County</i> , Academy of Medicine Bldg., Atlanta, T. J. Anderson, Secretary	August 7
<i>Habersham County</i> , Commercial Hotel, Cornelia	August 7
<i>Jefferson County</i> , Jefferson County Hotel, Louisville, John J. Pilcher, Secretary	August 13
<i>Jenkins County</i> , Millen, A. P. Mulkey, Secretary	August 1
<i>Laurens County</i> , Dublin Country Club, John A. Bell, Secretary	July 31
<i>Mitchell County</i> , Mitchell County Hospital, Camilla, A. A. McNeill, Secretary	July 29
<i>Newton-Rockdale</i> , Newton Hospital, Covington, J. W. Purcell, Secretary	August 19
<i>Peach Belt</i> , Peach Belt Hospital, Fort Valley, W. G. Tolbert, Secretary	August 19
<i>Spalding County</i> , Elks Club, Griffin, J. W. Watkins, Secretary	August 5
<i>Upson County</i> , Upson County Hospital, Thomaston, Doug L. Head, Jr., Secretary	August 12
<i>Ware County</i> , Waycross, A. M. Knight, Secretary	August 7
<i>Wayne County</i> , Jesup, Albert L. Howard, Secretary	August 11
<i>Whitfield County</i> , Library, Hamilton Memorial Hospital, Dalton, James F. Redfearn, Jr., Secretary	August 20
<i>Wilkes County</i> , Wolfe's Barbecue, Washington, J. N. Shearouse, Secretary	August 19
<i>Tenth District</i> , Thomson, Harvey Cabaniss, Jr., Secretary	August 15

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COVER

"DOC MAG SAYS" is the title of M.A.G.'s new health column that is mailed every week to Georgia's rural newspapers. Since April it has been published in more than 100 papers. See Editorial on Page 399.

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DRUG TREATMENT OF URINARY TRACT INFECTIONS OR, GELMO REVISITED

HARRISON F. FLIPPIN, M.D., *Philadelphia, Pennsylvania*

THE YEAR 1958 represents the 50th anniversary of the historic publication by Gelmo, describing the synthesis of an azo dye, possessing extraordinary color-fastness, which contained para-amino-benzine-sulfonamide. The observed affinity of this and related dyes containing the sulfanyl group for the proteins of silk and wool led, in the course of time, to consideration of the possibility that they might similarly have an affinity for bacterial protoplasm. This indeed, proved to be the case. As early as 1909, the synthetic azo dyes had been investigated for their antibacterial activities in vitro, but it was not until 1935 that the therapeutic properties of the sulfonamides (Prontosil) against experimental infections in laboratory animals were first reported. Since it had been known that aromatic amines are excreted as acetyl conjugates, the conclusion was obvious that the active constituent of Prontosil was sulfanilamide itself. In the following year, the therapeutic effectiveness of sulfanilamide against streptococcal infections in humans was established which marked the beginning of a new era in antimicrobial therapy. Although Gelmo did not investigate the bacteriologic properties of his compound, his discovery nevertheless opened the gates leading to the development of sulfonamide therapy. The fact that sulfonamides had proved their effectiveness prompted others to the study of other sources of antimicrobial agents which led, in turn, to the discovery of penicillin and other antibiotic agents. Truly, Gelmo's synthesis of an azo dye containing a sulfanyl group opened a new chapter in the control of infectious diseases.

Certainly, the sulfonamides provided an entirely new approach to the treatment of urinary tract in-

fections, in that the great majority of the derivatives of sulfanilamide afford antibacterial action not only in the urine but also in any part of the body that the blood carries them in sufficient concentration. With the advent of the antimicrobials of fungal origin, indications for the sulfonamides soon became increasingly more restricted, but despite the rapid advances in antibiotic therapy, the sulfonamides still occupy an enviable position in the treatment of urinary tract infections. However, regardless of the proven value of the sulfonamides and other antibacterial agents in the management of infection involving the urinary tract, one cannot fail to be cognizant of the fact that many patients with urinary tract infections are refractory to treatment with the available antimicrobial agents. Obviously, this situation is incapable of improvement, unless the factors contributing to the development of infections of the urinary tract, as well as those responsible for therapeutic failures, are known and understood.

Pathogenesis of Urinary Tract Infection

Bacteria may reach the urinary tract through various pathways—hematogenous, lymphogenous, urogenous, and contiguous—but the infection only evolves into disease when something happens which upsets the equilibrium between the host and parasite. In other words, infection is in many cases the normal state and it is only disease which is abnormal. Hence, much of the burden of urinary tract disease is no doubt caused by pathogenic agents which are maintained normally and manifest their presence only under the stimulus of other factors of environment. Thus, the subsequent course of in-

fection involving the urinary tract is determined by factors concerning the host and the properties of the bacteria. For the most part, the treatment of infections has been primarily directed at the specific etiological infective agents, with the result that other factors concerned with the cause and control of infectious diseases are often not considered. In other words, the microbial parasite, rather than the host, receives first consideration and one often loses sight of the patient as a whole. This neglected aspect of the control of infections has been the subject of study for many years and, although much has been learned, the problem of host-parasite relationship is far from being clearly understood. Hence, it seems advisable to consider certain aspects of this problem, especially as related to the control of infections involving the urinary tract.

Host Factors-Mechanical

One of the most common predisposing causes of, and obstacles to recovery from, urinary tract infections is urinary stasis, caused by congenital or acquired abnormalities of the genitourinary tract. These abnormalities which interfere with free urinary drainage range from microscopic congenital dysplasia, or immaturity of the nephrons, to gross, acquired, structural abnormalities, such as urethral stricture. Likewise, impairment of bladder function and consequent urinary tract infection may occur in a variety of disorders of the nervous system (Tabes dorsalis, spinal cord injuries, following spinal anaesthesia, etc.). Furthermore, the incidence of urinary tract infections is higher after repeated catheterizations, indwelling catheters, and instrumentation in patients with obstructions, especially of the lower urinary tract, than in those with ureteral obstruction, or absence of any obstruction. No doubt these mechanical factors play a prominent role in the increased incidence of urinary tract infections of early childhood, in the aged, and in females. In infancy and childhood, congenital malformations and fecal contamination during the diaper period, especially in females as a result of a short urethra, predispose to infection. Likewise, in women, sexual intercourse during the first six weeks of marriage—"Honey-moon cystitis and pyelitis"—and pregnancy appear to predispose to urinary tract infections although their exact pathogenesis is unknown. Such conditions as prostatic hypertrophy account for the greater incidence of urinary tract infections in the aged male.

Host Factors-Functional

At this time, knowledge of specific host defenses in the pathogenesis of urinary tract infection is limited. No doubt a mixture of the cellular and humoral de-

fense mechanisms of the body play a role in the clearing power of normal tissues. For example, invasion of the body by bacteria is probably going on continuously as a result of penetration of presumably intact barriers. Thus, microorganisms sporadically gain access to the blood stream, but the transient bacteremias which they cause are of consequence only when an associated anatomic abnormality leads to the establishment of a focal infection. Such bacteremias often follow operative procedures upon the large bowel and prostate, especially transurethral resection, and, in the absence of any organic abnormalities, the microorganisms are promptly filtered out of the circulation and usually destroyed. Although certain immunological reactions are given credit for this phenomenon, other points of view have been recently expressed regarding the problem of host-parasite relationship which are worthy of comment.

Several interesting reports suggest that there are multiple antimicrobial agencies in the tissues and body fluids that are probably more important than the immunological reaction. Dubos¹ has shown that lactic acid possesses antibacterial activity against many bacterial species precisely under the conditions which normally exist in inflammatory areas and thus acts as a natural antibiotic. In contrast to lactic acid, other substances accumulating at the site of a necrotic breakdown, such as keto acids, favor bacterial growth and can antagonize to some extent the bactericidal effect of lactic acid. Suggested evidence of this relationship is found in the great susceptibility to infection associated with uncontrolled diabetes, or with acute starvation, in both of which conditions ketosis is often present. In both instances, the ensuing infections are easily controlled diabetes or with acute starvation, in or the starving individual is returned to a satisfactory nutritional state. Likewise, cortisone, by reducing the inflammatory reaction, is likely to decrease the production of lactic acid at the site of a lesion. The above reasoning is in keeping with the long established facts that patients suffering with diabetes mellitus are more susceptible to infection than normal individuals and that malnutrition is often accompanied by various infectious diseases. Likewise, there exists a large body of clinical observations that the adrenocorticosteroids may interfere with the defense mechanism of the host, permitting a silent infection to cause a disease process, or a localized infection to spread through the tissue of the body. Of particular interest to the present discussion is a recent study² which showed that the administration of the amino acid, methionine, to patients with chronic urinary infections led to a marked decrease in the urinary pH and the appear-

ance of an as yet unidentified bacteriostatic substance in the urine, with lowering of the urinary bacterial counts.

Recently, it has been demonstrated that in many instances the bactericidal activity which fresh, normal serum exerts on certain species of bacteria is due to properdin, a euglobulin present in the electrophoretic fraction III, which has been found entirely distinct from immune antibodies, from complement, from all known coagulation factors, and from any previously recognized constituent of serum. Although much of the evidence is indirect, there is little doubt that properdin plays a significant non-specific role in the defense against infection.³ In this connection it has been demonstrated that the addition of gamma globulin to antibiotics gave clinical results in a variety of infectious disorders that could not be obtained with antibiotics used alone.⁴ In none of the patients so treated was there any evidence of hypogammaglobulinemia, nor any changes in serum proteins or electrophoretic patterns due to the relatively large doses of gamma globulin that had been used. However, the important question of the mechanism of action in the salutary effect of gamma globulin and antibiotics was not determined, although it was suggested that some bactericidal substance, such as properdin, was being given.

The widespread use of the antimicrobial agents has also resulted in certain untoward effects which illustrate the complexity of the factors affecting the virulence of the parasite and susceptibility of the host.⁵ Many of these drugs are capable of producing a profound alteration in the composition of the bacterial population that normally inhabits the urinary tract. This by-product of antimicrobial therapy is responsible for the superimposition of a serious infection on the one for which treatment was initially instituted, and is often difficult to treat with the presently available anti-infective drugs. Its appearance during the administration of an antibiotic may convert a benign, self-limited disease into a serious, prolonged, or even fatal one. Superinfections tend to occur in the extremes of life and in those patients debilitated by some underlying disease, such as leukemia or lymphoma. Although it may accompany the use of various antibiotics, superinfection appears to occur most frequently after the employment of the so-called "broad-spectrum" agents. Superinfection involving the urinary tract is due to a variety of organisms, particularly Gram-negative rods and monilia. These do not necessarily consist of drug-resistant variants of the organisms present in the normal flora, but rather different microbial species which apparently could not successfully compete with the original flora under normal

conditions, and had a chance to increase in number, and possibly in invasive capacity, only after the normal flora had been eliminated or depressed by antibiotic therapy. In this connection, it is interesting to postulate the cause for the increased incidence of certain salmonella diseases in recent years. It is known that many coliform bacteria act as antibiotics against salmonellae⁶ and may play a protective role for the host against this group of pathogens. Furthermore, the majority of salmonella infections represent cases of gastroenteritis, of which many are mild and recover without specific treatment. However, if such cases are treated with antibiotics that are effective against the antagonistic organisms but not against the salmonellae, the intestinal flora may be so altered as to allow the multiplication and spread of salmonellae throughout the body. Likewise, many patients with salmonellosis with focal manifestations have developed the disease while on adrenal steroid therapy. These represent but a few examples of the many studies that are now being carried on regarding host-parasite relationship.

Drug Toxicity

In addition to their antibacterial action, the use of the antimicrobial agents represents a potential hazard to the host, in that for the most part every known therapeutic substance can produce a toxic reaction in man if the exposure is adequate. Such untoward reactions have occurred with all of the now available antimicrobial agents. It is true that many are mild and do not necessarily interfere with treatment, whereas others are more severe and at times prove fatal, thus often making the control of toxic reactions from the drugs more of a problem than the disease itself. Nevertheless, the more serious toxic reactions from the antimicrobial agents may be avoided or minimized by knowledge of the hazards of each agent, using recommended dosages, avoiding undue prolonged administration of the drug, and using the more toxic agent only when a less toxic drug is ineffective.

Bacteriologic Considerations

For the most part, knowledge of specific pathogenicity of different bacterial genera for tissues of the urinary system is scanty. However, it is known that urinary tract infection is most frequently (95 per cent) associated with bacterial incitants which are normally endogenous to the alimentary canal. Gram-negative bacilli occur in approximately 75 per cent of cases; the Gram-positive cocci accounting for the remaining infections. *E. coli* represents by far the most commonly occurring Gram-negative organism; the *Klebsiella* species, which includes *A. aerogenes* and Friedlander's bacillus, account for a substantial proportion of the causative agents; while

the paracolon group and members of the genera *Proteus*, *Pseudomonas*, *Salmonella*, *Alkaligenes*, and *Shigella* appear in varying frequency. Of the Gram-positive cocci group, enterococci occur most frequently, with the staphylococci and the other species of streptococci accounting for the remaining infections. *E. coli* is associated with both acute and chronic urinary tract infections, and in acute infections which develop outside the hospital it is found to be the responsible organism in all but a few cases. In contrast, the other Gram-negative bacilli, enterococci and staphylococci, are most often associated with chronic infection in patients with obstructive lesions, especially in cases that develop infection following catheterization, instrumentation, certain operative procedures, or antecedent antibiotic therapy. Single bacterial species are found in urine in a high percentage of acute uncomplicated urinary infections whereas mixed cultures occur commonly in patients with chronic infections associated with structural abnormalities of the urinary tract. Just what role symbiosis plays in such cases is unknown.⁷

Acquired Drug-Resistant Infections

The acquisition of drug resistance by a microorganism was probably first discovered by Ehrlich when he found that trypanosomes could become resistant to arsenical compounds. Similar observations have been made in the use of modern antimicrobial agents. Although the true nature and origin of drug-resistant bacteria are not clearly understood, it would appear that, regardless of the mechanism, the organisms which were originally present in small numbers, or which were implanted from outside sources in small numbers, overgrow the predominant organisms because the latter are susceptible to the drug, while those which replace them are not. Also, it seems clear that the potential emergence of resistance during exposure to the antimicrobics both in vitro and in vivo varies widely for the different drugs and for the various species of microorganisms. Furthermore, this increased microbial resistance following exposure to an antimicrobial not only holds for the drug itself but also the possibility of the development of cross-resistance to other antimicrobics exists. It has become obvious that subinhibitory concentrations of a drug, particularly when prolonged, facilitate the development of drug-resistant bacteria.

Acquired bacterial resistance to the sulfonamides plays a definite role in therapeutic failures with this group of drugs, as bacteria initially sensitive to the sulfonamides are capable of acquiring resistance in

vivo. An organism resistant to one sulfonamide is resistant to comparable concentrations of other members of the sulfonamide group. However, the sulfonamides are less likely to cause the development of drug-resistant organisms than most antibiotics, which are used in combating infection of the urinary tract. Resistance to nitrofurantoin (Furadantin) as yet has not been well documented, although it has been observed that certain bacteria isolated from the urine of patients who had been treated with this drug for a period of two weeks exhibited a decrease in sensitivity to the same drug.⁸ Likewise, resistance to the mandelates has not been a prominent clinical problem.

Of the antibiotics, streptomycin exhibits the greatest potential for the development or emergence of resistant strains. Likewise, dihydrostreptomycin behaves in the same manner and cross-resistance between this antibiotic and streptomycin is complete. Novobiocin and members of the erythromycin group—erythromycin, oleandomycin, and speramycin—may show rapid and significant increases in resistance, especially among staphylococci, streptococci viridans, and enterococci. Cross-resistance occurs among the erythromycin-like drugs, whereas there is no cross-resistance between novobiocin and any other antibiotic. Resistance to the tetracyclines has occurred in a large proportion of staphylococci, especially those isolated in hospitals where these agents have been used extensively over long periods, as well as among enterococci, *E. coli*, *proteus*, and *shigella*. Although there is essentially cross-resistance among the three tetracyclines, the degree of resistance may vary in different strains. Resistance to chloramphenicol occurs infrequently, except in cases which have been intensively treated with the antibiotic. However, there are an increasing number of strains of Gram-negative bacilli found in urinary tract infections which are naturally resistant to chloramphenicol. For the most part, penicillin remains unique among the commonly used antibiotics in that, with the possible exception of certain strains of staphylococci, there is no real evidence of penicillin-resistant strains of microorganisms cultured from patients. Likewise, no cross-resistance between penicillin and other substances has been observed. No doubt, the increased resistance to penicillin of staphylococci is probably largely the result of an increased incidence of naturally resistant strains. However, strains of staphylococci which are capable of producing only small amounts of penicillinase and thus are only slightly resistant to penicillin, may augment this resistance by an increased ability to produce this penicillin-inactivating enzyme by their exposure to penicillin. Resistance and cross-resistance have not been recorded with the poly-peptide

group—bacitracin, polymyxin, and neomycin—nor with vancomycin (Vanocin) and ristocetin (Spon-tin).⁹

Since acquired resistance for the most part results from continued exposure to subinhibitory concentrations of these drugs, the best means of protecting against the emergence of such strains is energetic and aggressive treatment with drugs that have proven effective. Likewise, the administration of a combination of effective drugs to prevent the appearance of resistant organisms as has proven successful in tuberculosis may be worthy of trial. However, in urinary tract infections, the resistant bacteria often represent new organisms of nosocomial origin, rather than the emergence of resistant variants of the original strains;¹⁰ hence, one would expect little value from multi-drug therapy in such instances. Reports would indicate that cross-infection, rather than auto-infection, is responsible for the high incidence of urinary tract infections in urological wards. A number of potential sources of cross-infection which have been investigated,¹¹ yielded one or more urinary infecting strains—bottles used for collecting urine from patients with indwelling catheters, urinals, nurses' hands, etc. It was concluded that an important factor was transfer of bacteria from the catheter of one patient to that of another by the hands of the attending personnel. Hence, reinfection is usually nosocomial in origin in chronic urinary tract infections and instrumental and repeated or continuous catheterization are the major sources of the new infections.

Treatment of Urinary Tract Infections

For the most part, the treatment of infection of the urinary tract is an intricate problem. First, it is essential to determine whether an infection is actually present and, if so, whether it is an uncomplicated infection or is secondary to some co-existing lesion. In a complicated case, attention must be directed primarily toward the secondary lesion, in that the antimicrobials alone will not cure the condition. At best, these drugs cannot do more than provide temporary help and should therefore be reserved to prepare the patient and carry him through the period necessary for the correction of an anatomic or physiologic defect. Certainly, the administration of these drugs is of no help in malignancy, stone, cicatricial urethritis, interstitial cystitis, etc. and, if used in such conditions, their usefulness may be limited at a later date. Likewise, it is unwise to use these drugs in certain chronic diseases of the urinary tract, such as prostatitis and epididymitis, or to try to clear up an asymptomatic pyuria in a patient who has undergone a prostatectomy. Hence, before starting such therapy, it is important to determine the presence, type, and site of the infection,

as well as the pathologic conditions associated with the infection. This, in turn, is dependent upon an accurate history, thorough physical examination, careful study of the urine and, if indicated, further diagnostic procedures.

The most important initial steps in establishing the diagnosis of an infection of the urinary tract are microscopic examination and a Gram smear of sediment from a properly obtained specimen of urine. Theoretically, these procedures may indicate that an inflammatory process is present somewhere along the urinary tract and in many instances demonstrate the presence or absence of organisms; and, if present, whether they are bacilli or cocci, or Gram-negative or Gram-positive. Amicrobia suggests virus infection, tuberculosis, interstitial cystitis, and posterior urethritis in women. Furthermore, from these studies, especially in acute infections, the proper selection of drug therapy can often be determined. However, in those cases that fail to respond satisfactorily, it becomes necessary to culture the urine and, in selected instances, to obtain sensitivity studies with the various antimicrobials against the infecting agent, or agents. Although the approach to the establishment of specific infection of the urinary tract sounds simple, the fact is that it often represents a difficult diagnostic problem, particularly when the infection is of a chronic nature; the most obvious difficulty being the contamination of urine during the collection or handling of the specimen.

In a group of patients at the Philadelphia General Hospital (Blockley Division) with urinary tract infections,¹² none of whom had received antimicrobics nor had been subjected to instrumentation, and from whom urine specimens were collected by regular nursing personnel, it was not possible to demonstrate the same organisms in two consecutive specimens taken within a 24-hour period in 70 per cent of the cases. It seemed very unlikely that such an intrinsic urinary flora variation would exist in patients with a stable homeostasis unmodified by internal drug therapy or external manipulation. While this possibility could not be entirely eliminated, it seemed more likely that under these conditions the urinary flora would be expected to remain constant. Hence, the observed variation would most likely be attributable to contamination at the time of taking the specimen, in that subsequent studies have shown that the use of metal, rather than rubber catheters, in females, by trained individuals, plus the collection of multiple pretherapy specimens (two within 24 hours of each other) has markedly reduced the above variation in organisms found in the urine in the same patient within 24 hours. Other investigators¹³ have found glass catheters prefer-

able to rubber in catheterizing women, in that they are more easily cleaned, less painful, and less traumatizing. Nevertheless, despite the most meticulous care, the bacteria which normally inhabit the urethra may contaminate urine spontaneously voided or collected by catheter. Thus, the finding of potentially pathogenic organisms in a so-called clean specimen of urine may be suggestive but not conclusive evidence of an infection. Thus, catheterization does not provide a completely trustworthy specimen for cultural examination and is also hazardous from the standpoint of initiating infection in the bladder. In fact, many workers¹⁴ in this field are of the opinion that catheterization does not seem warranted to obtain a clean specimen for routine or urinalysis, or even for bacteriologic study. Recently, a new method not involving catheterization for checking uncontaminated urine specimens for culture from females has been described.¹⁵ In brief, the method consists of the nurse who is equipped with sterile gloves, separating the patient's labia, which is then followed by careful cleansing of the meatus with downward strokes, using in turn one dry sterile gauze sponge and two PhisoHex-immersed sponges, and pouring 30 cc of sterile saline solution over the cleansed area. The patient is then instructed to void forcibly and, after allowing the initial stream of urine to cleanse the urethral canal of organisms, the nurse collects the specimen by catching the subsequent stream into the culture tube. According to these investigators, this procedure represents the method of choice for securing specimens of urine for bacteriological study from women, in contrast to catheterization. A similar approach has been described for collecting samples in males.¹³ The patient, after the glans penis and the external meatus have been thoroughly cleansed, is instructed to stand, if possible, to retract the foreskin, and to void into any container a portion of his bladder contents. While the stream is flowing, an attendant catches a portion "on the fly" in a sterile test tube.

In a study¹⁶ of the flora of the so-called clean or midstream voided urine of men and catheterized specimens from normal women, it was found that 82 per cent of the former and 34 per cent of the latter contained bacteria, of which many were potential pathogens. However, in most subjects these organisms, although present, were few in number. This observation has been borne out by others¹⁷ who believe that counts of more than 100,000 organisms per cubic centimeter of uncentrifuged urine indicate active urinary tract infection. Likewise, that any organism seen in a direct smear of un-

trifuged urine stained by Gram's method is probably present in the specimen in numbers of 100,000 per cubic centimeter, or more.

As mentioned above, a careful taking of the history, both present and past, and a thorough physical examination are of the greatest importance in properly evaluating a patient who is suffering from a urinary tract infection. The complaints of burning and frequent urination represent the most common symptoms, although at times urgency, dysuria, and hematuria may be present in a case, depending on the underlying pathologic entity. If these symptoms are carefully considered in the light of their relationship to the act of voiding, to any associated pain or distress, to any symptoms suggesting particular pathologic conditions, such as pain in the flank, suprapubic discomfort, vaginal distress, or dyspareunia, and associated findings on physical examination, the physician will often be promptly rewarded by the proper lead.¹⁸ If the details suggest the presence of a coexisting pathologic condition, a complete urologic study should be made immediately. For the most part this includes excretory urography and cystoscopy, but at times retrograde pyelography and functional studies are also indicated. Likewise, special roentgenographic studies are often necessary in patients suspected of perinephric abscess. In addition, it is to be remembered that certain extra-urinary foci of infection may be responsible for recurrent urinary infection, such as endocervicitis, anal fistula, diverticulitis, repeated intestinal infections, and infections of the respiratory tract.

Selection of drug—Assuming that the focus, the extent and type of infectious process, and the responsible bacteria have been defined, then the institution of proper therapy is further determined by the knowledge of the antibacterial spectra and pharmacologic behavior of the different antimicrobial agents. As indicated above, sensitivity studies are not made routinely except when one is dealing with bacteria, different strains of which are known to exhibit wide variation in susceptibility to these drugs. It appears to be generally true that strains of gonococci and Group A hemolytic streptococci are quite uniform, whereas staphylococci, enterococci, and Gram-negative bacilli differ widely in their antimicrobial sensitivity. Likewise, if several courses of treatment with a presumably effective drug have not cured the infection, such studies are indicated. Although the determination of bacterial sensitivity to antimicrobials is a widely employed procedure, its results may be misleading to the physician unless properly interpreted. In general, it is wise to consider results of sensitivity tests, as determined routinely in most laboratories, solely as

qualitative guides to distinguish susceptible from non-susceptible organisms and to select the antimicrobial agent to be used on the basis of location of infection in relation to drug pharmacology and state of the patient.

In urinary tract infections, the offending organisms are not only present in the involved tissue, but also in the urine. Obviously, removal of organisms from one site and not from the other will, at best, result only in temporary remission of the infection. Quite frequently, the selection of an antibacterial agent for use in a urinary tract infection is based on the demonstration that it is excreted in the urine in high concentration and consequently can be expected to be effective. This assumption is probably valid if the primary intention is to sterilize the urine. It should be remembered, however, that recommendations as to dosage are based on *in vitro* laboratory determinations of the urinary concentration of antibacterial agents which inhibits various test organisms. Since substances excreted by the kidney are more concentrated in the urine than in blood serum or tissue fluids, the demonstration of an inhibitory urinary concentration is no guarantee of the existence of a therapeutic blood or tissue concentration. Hence, the selection of an antibacterial agent and the dosage in which it is to be used should be based not only on the attainable urinary concentration, but also on the attainable tissue concentration. The existence of barriers such as round cell infiltrations, cicatrices, impaired renal function, or vascularization, militate against effective saturation of the tissue with the antibacterial agent and these must also be considered.

From the above, it is apparent that the treatment of urinary tract infection represents an individual therapeutic problem. Hence, the best that can be done as far as making recommendations as to specific therapy is to consider the various antimicrobial agents that are usually effective in such cases.

Synthetic Antimicrobial Agents

Sulfonamides—Since the sulfonamides are effective against a greater variety of bacteria than are most of the antibiotics, they represent the treatment of choice for acute infections of the urinary tract before the infecting organism can be identified. Many uncomplicated infections are thus successfully treated with these drugs alone. Likewise, the sulfonamides may be of value in suppressing the infection in certain chronic disorders, such as pyelonephritis. At this time, the confusion concerning sulfonamide administration is in considerable measure due to the claims made by rival manufacturers concerning the various preparations. For the most part, there seems to be very little basis for choosing one or another of the commonly used sulfonamides, as

far as clinical effectiveness and problems of toxicity are concerned. It is true that certain preparations have broader range of action *in vitro*, especially against enterococci, proteus, or pseudomonas, but clinically this apparent advantage is usually lacking, in that these organisms are often resistant to sulfonamides and usually occur in chronic complicated infections in which treatment is less likely to be successful. Likewise, the more soluble sulfonamides are considered less likely to cause renal toxicity than the relatively poorly soluble compounds. However, if one considers the dosages required for comparable blood levels, there seems to be little or no difference in this regard. The sulfapyrimidines (sulfadiazine, sulfamerazine, sulfamethazine) represent the most active sulfonamides and are used singly, preferably sulfadiazine, or in combination for all types of infections involving the urinary tract. The more soluble preparations, sulfisoxazole (Gantrisin), sulfadimetine (Elkosin), sulfamethylthiodiazole (Thiosulfil), sulfacetamide (Sulamyd), sulfamethoxypyridazine (Kynex, Midicil), and sulfathiazole (Sul-Spansion) are best used in the less severe acute and chronic infections. The latter two of this sub-group represent long-acting antibacterial sulfonamides which may prove especially advantageous for long-term treatment. In addition to the above, the relatively non-absorbable sulfonamides, phthalyl-sulfathiazole (Sulfathaladine) and succinyl-sulfathiazole (Sulfasuxidine) have been used with success in chronic infections of the urinary tract, which is presumably due to their action on established intestinal disorders which may be contributing to the urinary infection, or may be due to the excretion of small amounts of sulfonamide which act synergistically with the urea content of the urine.

Nitrofurantoin (Furadantin)—This drug is effective in the treatment of urinary tract infections caused by most organisms, except *Pseudomonas aeruginosa*. However, its activity against *Proteus* is variable. In contrast to the sulfonamides and antibiotics, nitrofurantoin is not present in the blood in an active form and thus acts only as a urinary antiseptic. Thus, it is not likely to eradicate the infection in the interstitial tissue of the kidney in pyelonephritis. Certainly, in treating acute pyelonephritis systemically, active bactericidal drugs are unquestionably better than urinary antiseptics. However, the results of a recent study¹⁹ suggest that long-term administration of nitrofurantoin in chronic pyelonephritis may be advantageous, particularly in the presence of renal insufficiency, in that the suppression of bacteriuria was associated with relief of symptoms and, in some instances, it resulted in measurable improvement in renal function. Although after many months of suppression, relapses prompt-

ly occurred when the drug was withdrawn. This observation is in keeping with the fact that treatment of chronic urinary tract infection with antimicrobial drugs frequently suppresses the infection but rarely eradicates it.

Mandelates—Although therapy with the salts of mandelic acid has largely been replaced by the other antimicrobial agents, they still may be used successfully, especially in enterococcal infections. However, to be effective, the acidity of the urine must be below a pH of 5.5 and, if this is not achieved by the mandelate alone, sufficient ammonium chloride should be given to reduce the pH adequately. However, as indicated above,² the oral administration of methionine leads to a marked decrease in the urinary pH and has been shown to enhance the activity of methenamine mandelate (Mandelamine) in the lowering of bacterial counts in the urine.

Antibiotic Agents

Penicillin—This antibiotic probably represents the most misused drug in the treatment of urinary tract infection, in that the great majority of causative bacteria are resistant to penicillin. However, it is most useful in infections due to gonococci, hemolytic streptococci, certain strains of staphylococci, particularly those isolated from urine of patients with no recent hospitalization, instrumentation, or penicillin therapy, and some strains of *Proteus*. In addition, penicillin has proved effective against many enterococcal infections but, since these organisms usually occur in the urinary tract in association with other bacteria, it is often necessary to combine penicillin with another antimicrobial agent in order to obtain a cure. Likewise, acute infections, in which the staining method reveals both rods and cocci, are best treated initially by a combination of penicillin and sulfonamides.

Streptomycin—This antibiotic is a useful adjunct in the management of urinary infections but, for the most part, the results have been disappointing. This is due in part to the ready emergence of bacterial resistance to the antibiotic and probably also to the failure to properly alkalize the urine. However, streptomycin has been of value when used in combination with other antimicrobial agents against enterococci and certain Gram-negative bacilli.

Neomycin—Neomycin is highly effective against urinary infection due to the genus *Proteus*, *Klebsiella* species, as well as *E. coli* and the paracolon group, but is ineffective against *Pseudomonas*. However, its renal and otic toxicity following parenteral administration is such that the drug is only used in selected situations.

Chloramphenicol (Chloromycetin)—Of all of the antibiotics, chloramphenicol is perhaps the most effective in the treatment of urinary tract infection. It is effective against most coccal infections, with the exception of the enterococcus, as well as against almost all bacillary infections, except those attributable to organisms of the genus *Pseudomonas* and certain members of the *Proteus* group. Nevertheless, chloramphenicol should not be used routinely but reserved for selected cases. The tetracyclines [chlortetracycline (Aureomycin), oxytetracycline (Terramycin), tetracycline (Achromycin, Tetracyclin, Steclin, Polycycline)] are especially active against *E. coli*, *Klebsiellae*, staphylococci, and enterococci and, although the three drugs usually act similarly against given bacterial strains, significant differences may appear and in difficult therapeutic problems, sensitivity studies to each drug are indicated. Erythromycin (Ilotycin, Erythrocin) finds its chief usefulness in the treatment of urinary infections due to staphylococci and enterococci and, in combination with other effective drugs such as chloramphenicol or streptomycin, may prevent the emergence of drug-resistant bacteria. Novobiocin (Albamycin, Cathomycin) is reserved for infections due to staphylococci which are resistant to other antibiotics and to certain strains of *Proteus*.

Polymyxin B (Aerosporin)—This polypeptide antibiotic is highly effective against certain Gram-negative bacilli, especially of the genus *Pseudomonas*. However, strains of *Proteus* are resistant. Because of nephrotoxic effects, the use of polymyxin is limited to the treatment of serious, resistant infections. Likewise, bacitracin, a polypeptide antibiotic with a bacterial spectrum resembling penicillin, because of potential nephrotoxicity, is limited to the same type of infections.

Multiple Drug Therapy

The concomitant use of antimicrobial agents offers several possible advantages in the treatment of urinary tract infections. As indicated above, penicillin and sulfonamides may offer a broad cover in acute mixed infections as revealed by Gram stain, until a definite bacteriological diagnosis is established by cultural methods. For severe Gram-negative bacillary infections, streptomycin or neomycin may be used with tetracycline or chloramphenicol, although the rapid development of resistance to streptomycin and toxicity to neomycin limit the period of treatment with these bactericidal agents. Nevertheless, if used early, they may facilitate eradication of an infection that will not subside when a bacteriostatic agent is used alone. In staphylococcal infections, massive doses of penicillin, plus erythromycin or chloramphenicol may be given, as the in-

initial therapeutic measures. Likewise, penicillin may be combined with streptomycin in enterococcic infection. In addition, two effective agents may be given concomitantly in hopes of preventing the emergence of drug-resistant organisms, but, as discussed above, multiple drug therapy for this purpose has been disappointing in urinary tract infections, largely because of the presence of nosocomial infections, rather than acquired resistance to the original infection.

Comment

Certainly, the management of urinary tract infection has changed tremendously since the clinical introduction of the substance described by Gelmo. Although the sulfonamides and other synthetic anti-infective drugs and those of fungal origin have transformed the treatment of these infections, their shortcomings still make physicians scratch their heads. When used properly, these drugs are usually highly effective in the control of acute uncomplicated urinary tract infections, but are often relatively ineffective in a chronic and complicated case. In the latter instance even the most submissive organisms may join a resistant group, or new organisms may appear which often transform a relatively mild infection into a serious therapeutic problem. Because a patient has been found to have a positive culture of an improperly obtained sample of urine, or is suffering with some disorder of the urinary tract which is not amenable to antimicrobial therapy, has undoubtedly resulted in many patients being treated unnecessarily with these drugs. A complete history and thorough physical examination, coupled with a microscopic examination and a Gram stain of a properly collected urine specimen, constitute the minimum of pre-therapy study. A patient found to have a urinary tract infection is best treated initially with the sulfonamides, unless contraindicated, and if they do not cure the infection a search should be made for the underlying cause, instead of switching to the antibiotics and thus going further into the therapeutic jungle. The possible exception to this being a trial with nitrofurantoin or the mandelates. Every effort should be made to locate the cause of the lack of response to the sulfonamides which requires a consideration of both the parasite and the host. The causative bacteria should be tested for sensitivity to the various antimicrobial agents and the patient should be reviewed as a whole, with special emphasis on the detection of certain abnormalities involving the urinary tract. From these studies the proper selection of therapy is established, but if the infection is found to be associated with complicating factors, these drugs cannot do more than provide temporary help, and should therefore be reserved to prepare the patient

and carry him through the period necessary for the correction of an anatomic or physiological defect.

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"V.I.P. MEETING"

"WIDESCREEN MEDICAL PUBLIC RELATIONS" focusing on a broader segment of national life will be considered when key medical men meet in Chicago August 27 and 28 for AMA's 1958 PR Institute. The 1958 session at the Drake Hotel, billed as the "V.I.P. Meeting," is designed for physicians, medical society staff personnel, and others working in the medical public relations field.

ISLET CELL TUMOR OF THE PANCREAS

GEORGE R. DILLINGER, M.D., C. H. WATT, JR., M.D., and
W. VANCE WATT, M.D., *Thomasville*

ORGANIC HYPERINSULINISM or insuloma is probably a more common pathologic state than is generally believed. Historically Langerhans described the islets in 1869. The first hyperfunctioning tumor was diagnosed and operated on at the Mayo Clinic by Dr. W. J. Mayo in 1927. The patient soon died because, in this instance, it was a metastasizing carcinoma. The first successful operation for tumor of the islet cells was done by Graham in 1929. In 1950, Howard, Moss, and Rhodes collected a total of 398 cases from the literature, and 224 of those cases were operated upon. Up to the present, at the Mayo Clinic the diagnosis has been made in approximately 100 cases.

The clinician must be ever alert and have the possibility of insuloma in mind, if it is to be diagnosed. Usually, symptoms have been present one to two years before diagnosis. It is a good rule for the clinician to check the blood sugar in every unconscious patient. It is also advisable to have blood sugar studies in those patients, who manifest bizarre symptoms, particularly if these symptoms are periodic in their appearance and are relieved by eating. Table 1 illustrates the various diagnoses with which these individuals are labeled.

EPILEPSY CHRONIC NERVOUS EXHAUSTION PSYCHOSIS CEREBROVASCULAR ACCIDENT HYSTERIA MENOPAUSE TETANY BRAIN TUMOR DIABETES ACCUSED OF BEING DRUNK HEART ATTACKS
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Table 1—Diagnosis in patients with Hyperinsulinism (before correct diagnosis was made).

The confusion in diagnosis is due to the unusual manifestations of hypoglycemia. There are two dif-

Definitive therapy is described in a patient previously suspected of having epilepsy, menopausal syndrome, or psychosis.

ferent clinical pictures or a combination of the two, (1) Epinephrinemia and (2) Cerebral Hypoglycemia. These are determined not only by the level of the blood sugar, but also by the rate at which it has fallen and the duration of the hypoglycemia, if the rate of fall in the blood sugar is rapid. The early symptoms are those which are observed during a mild reaction to the administration of too much insulin. These epinephrine like symptoms consist of sweating, weakness, hunger, tachycardia, and inward trembling. Secondly, if the blood sugar falls slowly over many hours, the manifestations are cerebral hypoglycemia, and the symptoms are headache, visual disturbances, mental confusion, coma, and convulsions. If the blood sugar falls rapidly and persistently, the early symptoms, due to excessive circulating epinephrine, merge with the symptoms of cerebral hypoglycemia. In insuloma the blood sugar may remain so low for most of the 24 hour period, that any aspect of the entire range of neurologic or psychiatric disorders may be simulated. The patient may have outbursts of temper, extreme depression, or apparent catatonic schizophrenia. There may be a sensory or motor loss of an extremity and even hemiplegia. With insuloma the same complex of symptoms tends to recur in the same patient and periodic symptomatology is a most important diagnostic hint.

In this discussion, time does not permit us to go into all the various types of hypoglycemia, but the following table illustrates the ideologic classification of organic hyperinsulinism, or insuloma.

1. PANCREATIC ISLET CELL ADENOMA.
 - a. SINGLE.
 - b. MULTIPLE.
 - c. ABERRANT.
 - d. ASSOCIATED WITH ADENOMAS OF OTHER ENDOCRINE GLANDS. (PARATHYROID, ANTERIOR PITUITARY).
 - e. PANCREATIC ISLET CELL "SUSPICIOUSLY MALIGNANT" ADENOMA (LOCALIZED).
2. PANCREATIC ISLET CELL CARCINOMA (WITH METASTASES).
3. GENERALIZED HYPERTROPHY AND HYPERPLASIA OF THE ISLETS OF LANGERHANS.

Table 2: Hyperinsulinism.

Table 2 illustrates the various possibilities that must be considered in these patients. With insuloma the attacks generally occur after a period of fasting or strenuous physical activity, and then occur most frequently in the morning before breakfast or in the late afternoon. The patient often learns that the ingestion of food prevents the attacks, and some set the alarm clock for early morning hours, so that they may eat and ward off the attacks. For this reason, many of the patients are obese, due to their unconscious attempt to control the situation.

If the physician is aware of the possibility of insuloma, the criteria established by Whipple, known as Whipple's Triad, is of great aid in determining whether or not insuloma is present.

1. THE ATTACKS COME ON WHILE THE PATIENT IS FASTING.
2. THE BLOOD SUGAR IS 50 Mg. PER CENT OR LESS DURING AN ATTACK.
3. THE ATTACK TERMINATES WITH THE ADMINISTRATION OF GLUCOSE.

Table 3: Diagnostic Criteria for Hyperinsulinism.

Of course, insuloma must be differentiated from functional hyper-insulinism and hepatogenic hypoglycemia. However, if the criteria of Whipple's Triad are met and liver function tests are normal, insuloma is almost invariably present.

In borderline cases various tests have been devised, and intolerance to prolonged fasting constitutes a most satisfactory diagnostic test. The patient is hospitalized and deprived of food for periods ranging up to 72 hours. Water, tea, or coffee without cream or sugar are allowed. The patient is closely watched, and blood sugar determinations are made, when the first evidence of hypoglycemia develops. The findings of a blood sugar value of 45 mg per cent or less, and the presence of hypoglycemic symptoms, relieved by the intravenous injection of glucose, is considered diagnostic. One or more 72 hour fasts, with negative results, are considered necessary to exclude the possibility of insuloma. Conn and Selzer use a provocative diet containing 50 grams of carbohydrate and 50 grams of protein with a total of 1200 calories. This is

given for two days and the patient is fasted on the third day. On the third day two hours of vigorous exercise is added. In suspicious cases every effort must be made to diagnose the presence of insuloma. However, the rigid diagnostic criteria must not be relaxed, or many people will be losing large portions of their pancreas unnecessarily. Insuloma may occur in all ages and in both sexes. Approximately 90 per cent of cases of organic hyperinsulinism are due to the presence of one or more benign functioning islet cell adenomas. So far, no case of islet cell carcinoma has been reported below the age of 18. Approximately nine per cent of functioning islet cell tumors are malignant. The presence of metastases is required for the diagnosis of malignancy. Upon the basis of autopsy findings, about 80 per cent of islet cell adenomas are functionless.

After diagnosing organic hypoglycemia or insuloma, according to the rigid diagnostic criteria, the problem is a surgical one. Consideration must be given to several factors before surgery. These patients are usually very fat, making adequate exposure of the pancreas a difficult feat at the operating table. The function of the normal islets has been suppressed, with the excessive production of insulin by the tumor. A diabetic state usually follows, and may be severe immediately after removal of the insuloma. High carbohydrate feeding for several days may restore normal islet function.

Some of these patients develop idiopathic hyperthermia after surgery and expire from no apparent cause usually within four days. The patient may be prepared for surgery by giving steroids, either ACTH or hydrocortisone, both pre and postoperatively. This induces resistance to the activity of excessive quantities of insulin, and may prevent the idiopathic hyperthermia.

During surgery, when no definite tumor is found, the body and tail or two thirds of the organ should be resected. The reason for this is that most functioning tumors are located in the body and tail. In addition there may be generalized hypertrophy and hyperplasia of the islets, which may be benefited by this procedure.

The following case history is an illustration of a functioning islet cell tumor which proved to be a single benign adenoma:

Mrs. E. H. H., 43 year old white female, was referred to Archbold Memorial Hospital on November 27, 1956 with a history of having been unconscious for the preceeding 24 hours with episodes of loss of consciousness over a period of two years. These attacks usually occurred during the early morning hours, were relieved by breakfast, and then tended to recur just before the noon meal. The patient had previously been seen by several physi-

ISLET CELL TUMOR / Dillinger

cians, had been hospitalized for study, and had been diagnosed on different occasions as having epilepsy, menopausal syndrome, and psychosis. Confinement to a mental institution had even been recommended. The family history was irrelevant. Her husband was living and well.

Menstrual history: Periods were regular after onset at 14 years until age 39, when they became irregular, but without prolonged bleeding or other abnormality.

Past History: The patient had had malaria and influenza, but no allergy, cardiac, respiratory, or genito-urinary problems. Her only operations were an appendectomy in 1933 and excision of a spur on her left heel in 1953.

Physical examination: This revealed an unconscious white female with temperature of 98.6, pulse 80, B/P 140/80. Skin was dry and warm, eyes were divergent, rolling from side to side, pupils were moderately contracted, but reacted to light. The heart, lungs, and abdomen were apparently normal. Knee jerks were moderately hyperactive. Other reflexes were normal.

Preoperative Laboratory Tests Mrs. E. H. H.

RBC—4.8 MILLION, WBC—8,200, HEMO. 84% OR 13 GRAMS DIFF. 2 STABS. 81 SEGS. 15 LYMPHS, 2 MONOS.

BLOOD SUGAR 28 Mg %

CATHETERIZED URINE S/G 1.052, ALBUMIN NEGATIVE, SUGAR NEGATIVE, MICROSCOPIC OCCASIONAL EPITHELIAL CELL.

B. S. P. LIVER FUNCTION NORMAL

5 MINUTES—19.5% RETENTION

30 MINUTES— .5% RETENTION

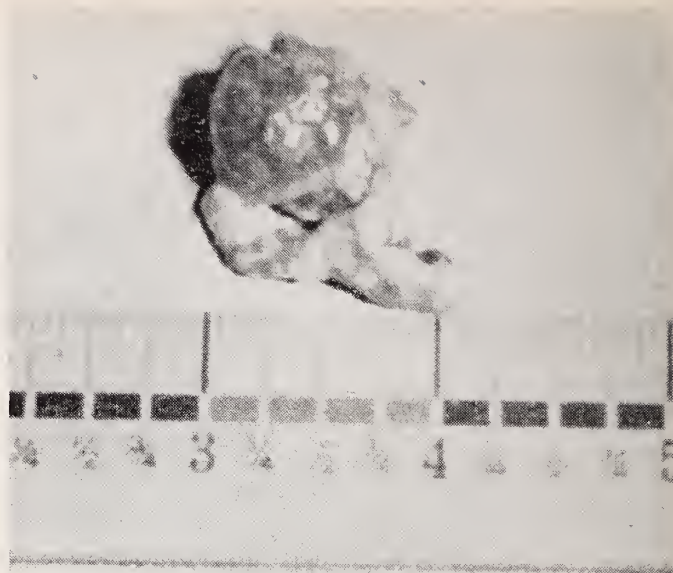
ICTERUS INDEX—9.2

TOTAL PROTEIN—5.4

ALBUMIN 3.4, GLOBULIN 2, A/G RATIO 1.7 to 1.

On the day of admission, a functioning islet cell tumor of the pancreas was suspected and she was put on a high protein, high carbohydrate diet with a four hour feeding schedule and intravenous glucose three times daily.

Exploratory laparotomy was carried out on 12-1-56 and revealed the gall-bladder, liver, stomach, small intestine, and colon to be grossly normal with the exception of some dilatation of the colon. The gastro-colic omentum was then opened to expose the pancreas. On the inferior border of the pancreas, approximately at the junction of the body and



ISLET CELL TUMOR.

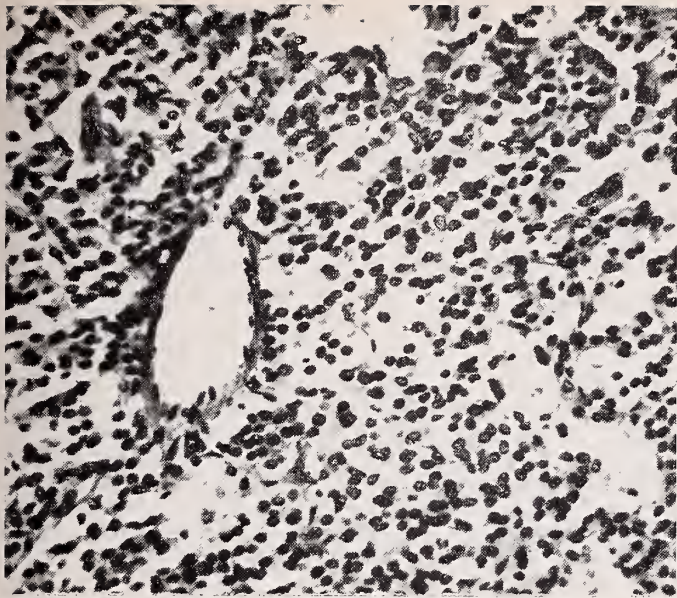
tail, was a hemorrhagic appearing, encapsulated purple tumor $1\frac{1}{2}$ cm. in diameter, looking definitely distinct from the surrounding pancreas. It was removed by V-excision along with a little normal appearing pancreatic tissue. The pancreas was closed with interrupted mattress sutures of silk and the abdominal wall closed after a drain was put in place. Pathological examination revealed the tumor to be an islet cell adenoma of the pancreas.

Gross Pathological description: Grossly the specimen is a spherical encapsulated tumor 1.5 cm. in diameter. Externally the color is dusky red, bisected surface is moist and dusky red, except for a small area which is grayish pink. Consistency of the tissue is slightly less than that of normal pancreatic tissue.

Microscopic examination: There is no evidence of malignancy. The sections are made up almost entirely of closely arranged cellular cords of cuboidal cells which have deeply staining ovoid nuclei and eosinophilic finely granular cytoplasm. In the interstitial connective tissue which is relatively



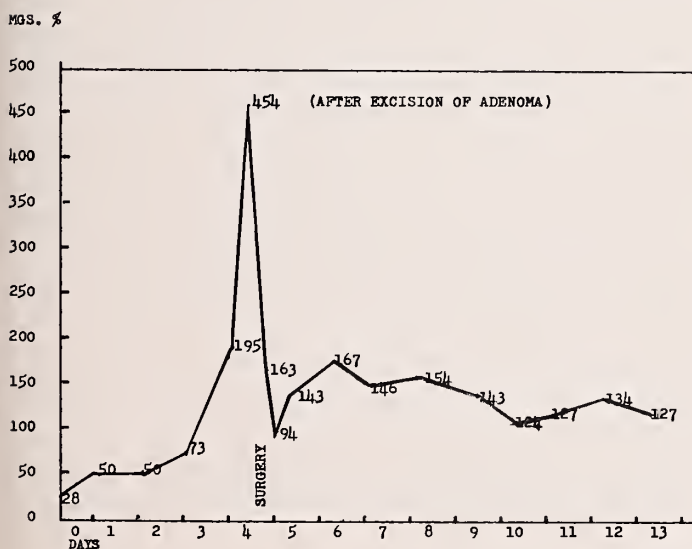
ISLET CELL TUMOR—High power.



ISLET CELL TUMOR—Low power.

sparse, there are numerous capillaries which are distended with blood cells. The areas of fatty connective tissue cells, a few minute foci of hemorrhage, and an occasional larger area of extravasated blood.

As one can see from the graph, this patient met the criteria as set up in Whipple's Triad. The fasting blood sugar was 28 Mg. per cent after a 24 hour fast, and the attack was relieved by intravenous



Blood Sugar Determinations. Islet Cell Tumor of Pancreas. Mrs. E. H. H. (Benign Adenoma).

glucose. The graph also demonstrates the post-operative diabetic state, which in this case proved to be relatively mild. The highest fasting blood sugar was on the second post operative day, being 167 Mg. per cent.

Table 4 shows office blood sugars done on the patient since surgery. All are within normal limits except the post prandial sugar on 8-31-57, which was 190 Mg. per cent. She has had no insulin since the day of operation.

1/14/57	FASTING	100 MGS.
5/ 6/57	FASTING	105 MGS.
8/13/57	TWO HOURS POST PRANDIAL	190 MGS.
12/ 3/57	AFTER EIGHT HOUR FAST	100 MGS.
1/ 2/58	FASTING	80 MGS.
	(Vomiting for three days with stone in left ureter)	
3/19/58	AFTER SIX HOUR FAST	105 MGS.

Table 4—Blood Sugar Determination—Islet Cell Tumor of Pancreas —(Mrs. E. H. H.—Benign Adenome).

On the thirteenth post operative day the patient was discharged to return home. She has been followed at intervals since surgery and has lost about 35 pounds weight by dieting. She continued well until January 2, 1958 when she was readmitted to the hospital with severe left abdominal pain, nausea, vomiting, and dysentery.

Intravenous pyelogram revealed a small calcification in the lower portion of the left ureter. On 1-3-58 cystoscopy was done with ureteral dilatation and extraction of the stone in the left ureter. The patient made an un-eventful recovery and has been well since that time.

Conclusions

1. The clinician must constantly be aware of the possibility of organic hyperinsulinism or insuloma.
2. Blood sugar determinations should be done on all unconscious patients and fasting blood sugars in all patients manifesting recurrent bizarre symptomatology.
3. Rigid diagnostic criteria must be maintained before considering surgery.
4. A case of islet cell tumor of the pancreas (insuloma) is presented which proved to be a benign adenoma.

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ROENTGEN EVALUATION OF CRANIAL ASYMMETRY

JOHN A. CAMPBELL, M.D., *Indianapolis, Indiana*

THE PAIRED ANATOMIC structures of the two halves of the skull rarely show perfect symmetry of growth about the sagittal plane. However, a high degree of symmetry nevertheless exists in the majority of normal subjects. Unfortunately, the limits of normal degrees of asymmetry of the skull cannot be defined. Therefore, when asymmetrical changes are found clinically or roentgenologically, there is need for some orderly method of evaluation to differentiate the physiologic from the pathologic causes. In such an analysis, a knowledge of the factors influencing skull growth is essential.

Historical

As early as 1831, Bright¹ noted skull deformities overlying meningeal cysts. Deformity of one entire hemicranium related to cerebral atrophy, as well as certain instances of localized thinning or bulging of the vault was noted by Sear,² Penfield,³ Pendergrass and Perryman⁴ and others. In 1953 Arthur Childe⁵ classified cases as showing localized asymmetry due to such conditions as subdural fluid collections, cerebral agenesis or atrophy, gliomas, neurofibromas, and intracranial aneurysms. Harris Jackson⁶ in 1956 systematized localized types of cranial asymmetry. His classification is used in this discussion.

Radiographic Technique

McRae⁷ recommended tracing one side of a posteroanterior skull radiograph and superimposing it on the opposite side as a method of appraising the degree of cranial asymmetry present. He pointed out, however, that even the smallest amount of rotation of the skull could produce a pseudoasymmetry, with an apparent flatness at the side of the skull toward which the face deviated, and an apparent increase in the thickness vault on that side. In addition, the convolutional markings could appear to be decreased on the distorted side and the petrous ridges appear flatter in outline.

The most useful views in assessing cranial asymmetry are the lateral, basilar, 30 degree fronto-occipital (Towne), and posteroanterior projection with a 10-23 degree caudal tilt (Caldwell view or Bull's sphenoid fissure view). In infants it is frequently easier to take an anteroposterior view with the tube tilt reversed.

Jackson cautions that in the posteroanterior projections the patient should be positioned with the vertical plane of the nasio-inion line at right angles to the film and that the relationship of the plane of the facial bones to the surface of the film be disregarded. Placing the face parallel to the film exaggerates the degree of distortion when true asymmetry is present. This technique permits the easy recognition of pseudoasymmetry by noting the relative alignment of lambda, bregma, and the nasion to one another. In positional or pseudoasymmetry, these points do not lie in a normal vertical line, but diverge from one another.

The Caldwell view, when properly obtained, is the single most valuable projection in the analysis of asymmetry. It shows the profile of the vault to excellent advantage, the thickness of the parietal and temporal segments of the vault, the convolutions of the inner face of the vault, as well as all major sutures and vascular channels. In addition, this view is excellent for evaluation of the orbits, sphenoid ridges, sphenoid fissures, and the lateral margins of the greater wing of the sphenoid (linea innominata) as it passes vertically across the other portion of the orbit. The superior surfaces of the petrous ridges are nicely shown, and one has an opportunity to detect any increased pneumatization or decreased convolutional impressions.

The Towne view shows the degree of asymmetry of the posterior parietal convexities as well as any disproportion in the growth pattern of the lambdoid sutures. The basilar views show the shape of the

paired basilar fossae as well as the symmetry of the skull outline. The margins of the anterior, middle, and posterior cranial fossa may be compared for distortions. In this regard, the lateral view does not reliably show the limits of the middle cranial fossa because it is frequently vulnerable to rotational and positioning effects.

For clinical purposes, asymmetry of the skull is best considered according to the pathological processes which cause it.

Intracranial Causes

Excessive growth stresses may be extracerebral or intracerebral. The most common cause of extracerebral growth stress is a chronic subdural collection of fluid such as a hematoma. In the early stages, this imposes a mass between the brain and skull which produces a bossing and enlargement of the hemicranium, thinning of the overlying skull, loss of convolutional impressions on the inner table, elevation of the lesser sphenoid wing, lateral displacement of the greater sphenoid wing (*linea innominata*), and forward bulging of the middle cranial fossa. These changes are due to pressure effects on a growing, malleable skull by the hematoma. The unilateral enlargement of the skull suggests that the asymmetry is a result of local growth stimulus and not to a general increase in intracranial pressures. Thickening of the skull on the involved side may follow during the later stages of a chronic subdural fluid collection when the growth stress is diminished either by absorption of the mass, by secondary cerebral atrophy, or both. Chronic subdural hematomas may, therefore, present with an absence of thickening of the skull overlying the lesion, but at the same time show thickening of the skull on the opposite side. This is because hematoma strips off the endosteum which is needed for bone growth. The inner table is therefore smooth because it is protected from the growth stress of the underlying brain by the interposition of the hematoma. The thickening on the normal side is a cranial response to the release of pressure previously exerted by the growing brain as it was pressed up against the inner table by the acute subdural collection on the opposite side.

When the subdural hematoma lies across a suture line, the stripping off of the endosteum may prevent normal sutural ossification, and a persistent widening (not separation) of the suture is seen roentgenographically. This is similar to the widening of the suture lines seen with leukemic or neuroblastomatous infiltration of the subdural and epidural spaces.

Hypertrophy of the paranasal sinuses also occurs in some chronic subdural hematomas as described by Davidoff and Dyke.⁸ It is predominantly unilateral and occurs on the involved side. This phe-

nomenon is obviously due to a localized lack of growth stress rather than to decreased intracranial pressure or, otherwise, it would be bilateral. Such hypertrophy of the air cells is usually accompanied by thickening of the cranial vault on the same side indicating loss of intracerebral volume.

Bilateral chronic subdural hematomas may produce symmetrical enlargements of the vault of the skull with thinning of the tables, followed later by thickening of the inner table with or without hypertrophy of the sinuses. Whether or not the middle cranial fossae are enlarged depends on the location and size of the hematomas.

Intracerebral growth stresses result from slow growing tumors, cysts, and infiltrating lesions. These produce marked localized thinning of the overlying hemicranium. Usually there are increased convolutional markings from the intracranial hypertension. When such slow expanding lesions occur in the temporal lobe areas of the brain, they also cause elevation of the lesser sphenoid wing and lateral displacement of the greater sphenoid wing. These findings have been mistakenly called pathognomonic of chronic subdural hematomas.

Large diffuse intracerebral infiltrating neoplasms which grow very slowly over long periods may produce similar intracerebral growth stresses resulting in asymmetrical enlargement of the involved side.

Decreased growth stresses occur with the cerebral atrophies. Davidoff and Dyke, McRae, and Jackson list the following roentgen signs of unilateral cerebral atrophy:

1. Thickening and reduced volume of one hemicranium.
2. Hypertrophy of the ipsilateral frontal, ethmoid, and mastoid cells.
3. Elevation of the orbit and petrous bone on the involved side.
4. Flattening of the petrous ridge on the same side.
5. Displacement of the groove for the superior sagittal sinus and crista galli toward the atrophic side.
6. Loss of convolutional markings on the ipsilateral side usually accompanies the thickening and smallness of the skull.

When the lesser sphenoid wing is displaced, either upward or downward, or when there is thinning of the cranium on the small side, one should suspect an associated porencephalic cyst. These cysts, even though a part of a diffuse hemiatrophy of the cerebrum, constitute growing lesions, and as such, produce enough growth stress to thin out the skull adjacent to them. Diffuse hemispheric atrophy has been reported in extensive arteriovenous malformations and Sturge Weber syndromes.⁹

Cranial Causes

Primary cranial growth disturbances also may cause rather marked asymmetry of the skull. These are chiefly due to inhibited growth of the sutures such as occurs with primary craniostenosis. It may also result from an overgrowth of one segment of the skull due to delay in the closure of a suture, or excessive skull growth from the pressure of a large intersutural bone.

Plagiocephaly (slanting head) is usually due to a localized form of primary or fetal craniosynostosis involving one temporoparietal suture or one half of the coronal or lambdoid sutures. Diagnosis rests on observing the ridging, narrowing, or obliteration of all or a portion of the involved suture, the thinning of the cranial bones growing perpendicular to this suture, and the localized increase in convolutional impressions. The presence of these exaggerated convolutional impressions, particularly in the thin, underdeveloped portions of the skull, excludes the possibility of asymmetry due to atrophic conditions, or secondary craniostenosis resulting from cerebral hypogenesis. Such cases show decreased digital markings with thickened, smooth skulls due to lack of growth stress and inhibited suture growth. Since plagiocephaly may be due to other causes, it pays to look carefully for hemisutural closures, making certain that the coronal and lambdoid suture areas are adequately demonstrated on the films. Usually, cases of hemicoronal synostosis show a very small anterior cranial fossa on the involved side.

Premature closure of the metopic suture may produce ridging and sclerosis of the skull at the suture site and a decrease in the interorbital width. The skull is narrowed in transverse diameter, and there is usually absence of the frontal sinuses. Elevation of the lesser sphenoid wing also occurs in plagiocephaly due to cranial synostosis, and indicates traction by continued growth at the temporoparietal suture line. This gives a harlequin appearance to the orbit on the affected side because the lateral aspect of the parietal bone is growing vertically, but not in an anteroposterior direction. Detection of this type of orbital deformity necessitates close inspection of the metopic and coronal suture areas for partial premature closures.

Extracranial Causes

The most common type of cranial asymmetry is that due to physiologic or exogenous stresses, or some combination of these two factors. It is known to orthopedic and pediatric physicians as scoliosis capitis. It is often found in normal infants and children, and the hair may be atrophic over the flattened

portion of the skull. It is produced by extracranial pressure over a certain area for a considerable period of time such as that which occurs with prolonged recumbency when one side is favored for some reason. It is frequently seen in cases of torticollis, spinal scoliosis, mental deficiency, and systemic disease processes which cause prolonged recumbency. It may be of endogenous origin and occur with primary skeletal insufficiencies such as osteogenesis imperfecta. Here the softening of the skull bones permits flattening of the dependent portion.

The characteristic feature of scoliosis capitis is a rotation of the skull about the sagittal plane. This may produce little or no asymmetry on the Caldwell view, but is always appreciated on the basilar view. Most of the deformity is in the base of the skull which may be elevated on one side. The vault is usually normal.

Except where definite endogenous causes are apparent in the bone structures, scoliosis capitis should be considered physiologic in origin. While it is seen in association with numerous disability states and mental deficiencies, its presence roentgenologically neither suggests or excludes intracranial disease. The findings should be considered normal until proven otherwise.

Summary and Conclusions

The Caldwell and basilar views of the skull are the most useful in categorizing the various causes of cranial asymmetry. From the standpoint of roentgen technic, it is usually easy to position the head so that the nasion and sagittal suture are aligned for the Caldwell or reversed Caldwell view when the asymmetry is of extracranial origin, but this may be technically impossible when the cause is cranial. The basilar outline of an infant's skull is normally a perfect oval with the anterior margins of the anterior, and middle cranial fossae, as well as the posterior wall of the posterior fossae, directly opposite. In scoliosis capitis all three of these margins are displaced forward; in chronic subdural hematomas only the anterior margin of the middle fossa is displaced forward; and in hemicoronal craniosynostosis only the anterior margin of the skull is displaced backward. Likewise, in hemilambdoid craniosynostosis, only the posterior wall of the skull is displaced forward.

Patterns of skull asymmetry correspond to the general concepts of bone growth and the reaction of bone to various types of increased and decreased growth stresses, whether from within or without. Sutural growth determines the degree of cranial bone development perpendicular to the suture. Widening of a suture line indicates an increase in the growth rate (rather than separation by mechanical pres-

sure) just as narrowing of the suture line indicates a decreased growth rate. An increased growth stress at the suture line may cause it to remain open longer by interfering with the endosteal function. This explains why widened suture lines may be seen in conditions enlarging skull growth without increased intracranial pressure, as well as the absence of suture widening in certain patients with elevated intracranial pressures of recent origin.

Thinning of the inner table of the skull is thought by Jackson not to be due to high hydrostatic intracranial pressure, but to a localized reaction of the bone to growth of the immediately subadjacent tissues. This is a reaction in which the tissue adapts itself to the encroachment of a more rapidly growing neighbor. Generalized increased intracranial pressure would obviously cause uniform bilateral thinning of the skull in accordance with the laws of hydrodynamics. Porencephalic cysts, early subdural hematomas, and slow growing intracranial cysts and tumors produce such localized thinning.

Convolutional impressions are due to localized resorptions of the inner table in response to the growth of the underlying convolutions of the brain. These tend to disappear when the brain is underdeveloped, or there is an interposition of hematoma of fluid between the brain and skull.

Thickening of the inner table of the skull is produced by an overgrowth of the endosteum when the intracranial growth stress is decreased by atrophy of the underlying brain.

Elevation of the lesser wing of the sphenoid is a valuable sign in the assessment of cranial asymmetry and signifies the following:

1. Traction of the compensating growth of the temporoparietal suture.
2. Unequal growth pressures of the temporal and frontal lobes (atrophy, mass).
3. Abnormality of orbital growth.

The most marked elevation of the lesser wing of the sphenoid undoubtedly occurs in hemicoronal craniostenosis because of the compensating vertical growth of the temporoparietal suture. Marked elevation of the lesser sphenoid wing is also seen in conditions in which the hemispheres and particularly the middle fossa have been enlarged, such as chronic subdural hematoma or neurofibroma. Even in these instances, it is probable that the traction of the temporoparietal suture growth is the chief cause.

Inequality in the size of the frontal and temporal lobes due to atrophy with decreased growth stress at the temporoparietal suture also accounts for minor degrees of elevation or depression of the lesser sphenoid wing. Minor displacements have also been

recorded in hypogenesis of the greater sphenoid wing and orbital agenesis.

Asymmetry due to extracranial causes (scoliosis capitis) is the most common form and does not indicate intracranial pathology. The rotation of the skull about the sagittal axis with this type of deformity may be produced by gravity or external pressure effects, which may be exaggerated when the bones are more plastic (rickets). The asymmetry itself usually develops from prolonged recumbency on one side of the head such as the occiput, which flattens, while the brain falls away from the contralateral frontal area. These stresses mold the skull into the characteristic rhomboidal shape of scoliosis capitis.

Displacement of the crista galli, superior sagittal groove, elevation of the orbit, and asymmetry of pneumatization of sinuses and mastoids, have less specificity in roentgen evaluations, and should only be regarded as adjunctive signs.

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HILL-BURTON REPORT PUBLISHED

RESULTS OF A TWO YEAR STUDY of the Hill-Burton Hospital Survey and Construction Program are available in booklet form from the Committee on Medical and Related Facilities of the AMA's Council on Medical Service. Included in this report are sections on federal grants-in-aid; background and basic administration; general hospitals; tuberculosis hospitals; public health centers; mental, chronic disease, and nursing home facilities; diagnostic or treatment centers; rehabilitation facilities; conclusions and recommendations.

In addition to a review of the legislative background of the Act and a voluminous amount of other data, reports on field surveys made in the following states are included: Arkansas, California, Connecticut, Georgia, Illinois, Iowa, Kentucky, Maryland, Michigan, Mississippi, Montana, New Jersey, Oregon, and Washington.

A limited number of copies will be available to individual physicians and medical societies.

CHRONIC IDIOPATHIC JAUNDICE WITH UNIDENTIFIED PIGMENT IN LIVER CELLS

JOHN E. SKANDALAKIS, M.D., RICHARD H. JOHNSON, M.D., and
EDGAR O'CONNOR RAND, M.D., *Atlanta*

DUBIN AND JOHNSON in 1954 reported 12 authentic cases presenting this new clinicopathologic entity which, according to their opinion, is a new form of jaundice of excellent prognosis.

Since that time sporadic cases have appeared in the literature, and the so called "Dubin-Johnson Syndrome" has become familiar to physicians.

The case to be reported is one of chronic idiopathic jaundice with unidentified pigment in liver cells.

First Admission:

A 26 year old prima gravida was admitted to Piedmont Hospital 3-20-57 through 3-27-57 because of scleral jaundice noted on a routine office visit two days prior to admission. The patient was in her ninth month of pregnancy and appeared to be at full term. She described dark urine present for one week prior to admission but recalled no change in color of her bowel movements. She had noted no associated nausea, vomiting, fever, anorexia, itching, or abdominal pain. She had a venipuncture in December, 1956 but denied blood transfusions, alcohol ingestion, or contact with hepatotoxins. Her pregnancy had been uneventful and she had felt quite well.

Four years prior to admission she had a 10 day period of hospitalization in another state for jaundice associated with chills, fever, and general malaise. Jaundice slowly disappeared over a three or four month period. She was told that she had malaria at this time and received a course of atabrine.

Physical examination revealed moderate icterus, full term pregnancy, and diffuse enlargement of

thyroid. The liver and spleen were not palpable. Spiders and palmar erythema were absent. Admission urinalysis was normal except for 10-15 WBC/-HPF and a strong reaction for bile. Urine urobilinogen was not increased. Hemogram was within normal limits. No target cells or spherocytes were seen in the peripheral blood. Total bilirubin initially was 7.0 mg per cent. Subsequently the serum bilirubin rose to 12.9 mg per cent with 5.4 mg per cent direct bilirubin and 7.5 mg per cent indirect bilirubin. Icteric index 20. Ceph flocc was negative. Thymol turbidity four units. Alkaline phosphatase and prothrombin time were normal. Direct Coombs test was negative.

On attempted cholecystography the GB failed to concentrate the dye. Stools were normal in color.

On 3-22-57 labor was induced and the patient delivered a normal infant uneventfully. She continued to feel quite well despite continuing jaundice and was discharged 3-27-57. She was to return at a later date for further studies and re-evaluation.

A BSP done two weeks after discharge showed 16 per cent retention after 45 minutes. The GB series showed failure of concentration of the dye. An upper G. I. series was normal.

Second Admission:

On 5-17-57 the patient was hospitalized for re-evaluation. Physical examination was normal except for slight scleral icterus. Liver and spleen were not felt.

A G. I. series and chest film were normal. A GB series revealed a faint gallbladder shadow. No

stones were seen. Urinalysis was normal. Hemoglobin was 12.9 gms and the remainder of the hemogram was normal. NPN 27 mg per cent. Cholesterol 256 mg per cent. Fasting blood sugar 89.7 mg per cent. Ceph flocculation negative. Thymol turbidity 4 plus; total bilirubin 5.9 per cent; BSP 32 per cent retention in 45 minutes; VDRL negative; Sed rate was 10 in 30 minutes and 32 in one hour. Total protein 7.2 with 5.6 albumin and 2.1 globulin. Alkaline phosphatase 2.4 KAU.

The diagnosis of Dubin-Johnson Syndrome was entertained prior to operation but exploration was advised to rule out any type of surgical jaundice.

On 5-21-57 an exploratory laparotomy and punch and wedge biopsy of the liver were performed. The liver was normal in size and texture but was a mottled brownish black color. The biliary tree was normal. Liver sections revealed an unidentified pigment in liver cells with an otherwise normal lobular architecture. The pigment seemed to be concentrated in the centrolobular zone. No pigment was present in the Kupffer cells and there were no bile plugs in the canaliculi. The sinusoids were not dilated and there was no scarring, fibrosis, or round-

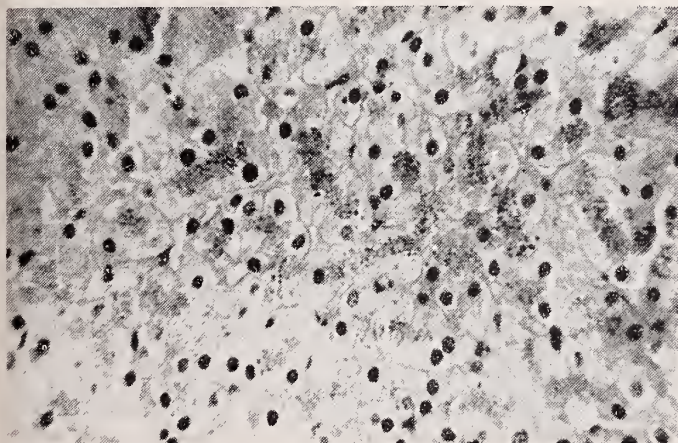


Plate 1: Granular Pigment in Liver Cells which otherwise appear Normal. H. & E.

cell infiltration. It was felt that the microscopic findings were compatible with the histopathology of the chronic idiopathic jaundice as described by Dubin and Johnson. (See Figure.)

The patient withstood surgery quite well and recovery was uneventful. A bilirubin drawn three days after surgery was 5.0 mg per cent (direct 5.3 mg per cent and indirect 0.8 mg per cent).

Additional information obtained from the parents after surgery revealed that the patient had jaundice for a two or three month period at the age of two years.

Discussion and Summary

In summary an authentic case of Dubin-Johnson Syndrome is presented.

The typical case of Dubin-Johnson Syndrome is a white male in his twenties with abdominal discomfort and pain in the right upper quadrant. He experiences weakness, anorexia, nausea, and vomiting. Jaundice, which usually fluctuates in intensity, is always present, but it is not hemolytic, obstructive, or inflammatory in origin. Both direct and total serum bilirubin are elevated and the liver cannot excrete bromsulphathalein or cholecystographic dyes.

Microscopically, storage of pigment with the liver cells is the predominant phenomenon and the only criterion for an accurate pathological diagnosis. This syndrome apparently has an excellent prognosis although time is needed for the ultimate prognosis. Treatment is necessary and there have been no re-

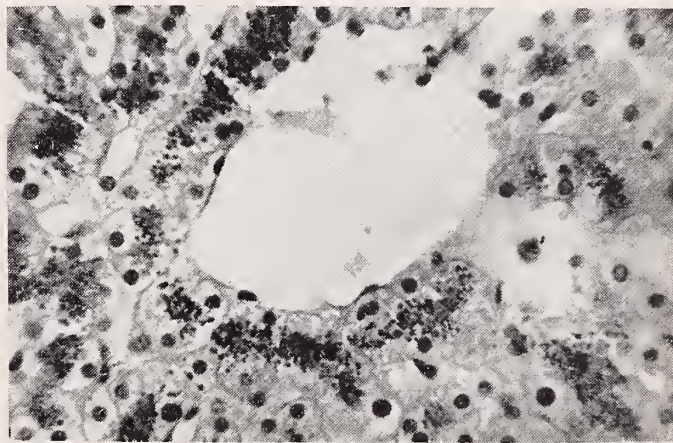


Plate 2: Higher magnification showing detail of distribution of granular pigment around centrolobular zone. H. & E.

ported deaths. The only problem is differentiation from a serious hepatic disorder.

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SOUTHERN MEDICAL ASSOCIATION HOLDS OPEN HOUSE

THE SOUTHERN MEDICAL ASSOCIATION will hold open house in its newly completed modern office building at 2601 Highland Avenue in Birmingham, Alabama on Sunday, September 7, from 2 to 5 P.M. Members and

friends will be received by the officers and staff and a formal and brief dedication will be held in the foyer promptly at 4 P.M.

MANAGEMENT OF THE TUBERCULIN CONVERTER

WILLIAM E. BELLAMY, JR., M.D., *Augusta*

THE DEVELOPMENT OF a positive skin tuberculin in an individual indicates that a state of sensitivity has occurred as a result of a tuberculous infection. Experimentally a positive tuberculin can be produced in a guinea pig from introducing into its body a large quantity of tuberculin organism, live or dead, but in humans a positive reaction generally denotes infestation followed by proliferation of the tubercle organisms with the degree of sensitivity and ultimate fate a variable quantity. It is this ultimate fate which physicians are very concerned about in deciding how to manage a positive reactor. It is the purpose of this presentation to examine some of the evidence available to see if a reasonable program can be recommended.

Fortunately, there are available studies made before the relatively recent advent of antimicrobial drugs on the fate of positive reactors and there are now emerging early results of the fate of positive reactors treated with these agents.

Table 1

Study	
<i>Frolick</i> ¹ : 1,830 school age children with positive tuberculin at age seven followed until age 20 in Oslo, Norway.	12.2 %—tuberculous manifestations between five - 20 years. 4.5 %—lungs. 3.9 %—pleura. 3.4 %—bone, joints, lymph nodes. .38%—meninges.
<i>Lincoln</i> ² : 980 children age three months to 12 years with primary tuberculin followed 1930-1947.	21.5 %—fatality. .95%—due to: meningitis—60% military —10% progressive primary.
421 children treated with SM, PAS, or sulfone if complication occurred (35 percent) 1947-1951.	5.0 %—fatality.
1951-1952 INH added.	1.5 %—fatality.

There are numerous factors having to do with the outlook of a reactor. In addition to inborn resistance, extent and duration of exposure, Lincoln

points out that the socio-economic picture is important and sites this as a possible explanation for differences in her figures on mortality of primary tuberculosis as compared to those of Myers.³ The age at which conversion occurs also seems to relate to prognosis and could bear on one's thinking in management.

Table 2

Author	Ages	
Debre ¹	0- 6 months	24.2 %—mortality.
	6-18 months	5-6 %—mortality.
	up to 13 years	.3 %—morbidity/year.
	after 15 years	2-3 %—morbidity during following 3-4 years with total morbidity 10%.

Of particular interest in this connection is the recently reported early results of a study carried out by the U. S. Public Health Service in which 2,750 children were under observation in 32 centers of which Augusta is one, under the supervision of Dr. Rufus Payne.⁴ In this study two randomly selected groups of positive reactors were followed. One was given INH in a dose of 4-6 mgm/kilo and the other a placebo, the idea being to see if complications could be prevented by the dose and not intended as a form of treatment. The study was originally limited to children below three years but later extended to include recent converters over three years and was expected to show what might be expected of untreated primary tuberculosis today, and what might be gained of an out patient program of treatment with small daily doses of INH.

It was found that risk of extrapulmonary complications is related both to age of child and extent of the disease, increasing with the degree of x-ray involvement and decreasing with age ranging from 182/1000 among children less than one year with parenchymal involvement to zero among children more than three with negative films. Risk for children less than one year is not small even with initial negative film; 33/1000 for those with hilar node

involvement. The risk for children between one and six was substantial only where there were positive x-ray findings. Both extrapulmonary complications and pulmonary spread occurred more frequently among children with tuberculin reaction of 10 mm to the intermediate strength (5TU). Serious extrapulmonary tuberculous complications developed in 26 receiving placebos and five who received INH. This is statistically significant.

It is interesting that Mrs. Shirley Ferebee⁵ reports a study carried out with the U. S. Navy among 69,000 recruits followed for a period of time. All of these men were skin tested and 7,675 were found to be positive. All had negative chest x-rays. The development of tuberculosis was 132/100,000 among the positive reactors and 20/100,000 among the negative reactors. One wonders what would have been the effect of giving INH to the positive reactors.

Programs of treatment vary from those who suggest treating all positive reactors, to those of the editors of the *New England Journal of Medicine*, who suggest that drugs be reserved for certain ones who develop complications citing the decline of mortality of 21.5 per cent to 1.5 per cent brought out by Lincoln's study.⁶

Programs

DEBRE:

Treat all infants below two years with positive skin test, children at puberty and post puberty period, tuberculous invasion with general symptoms, massive contamination. INH 10 mgm/kilo/d without exceeding 400 mgm.; 20 mgm/kilo/d for infants less than two years, PAS 300 mgm/kilo/d in one dose. Treat six to ten months. Out of 600 children so far, only one has had progression of disease.

LINCOLN:²

Treat only those developing or "likely" to develop complications. Mortality reduced from 21.8 to 1.5 per cent using SM, PAS, INH. No hastening of resolution of pneumonic process. No miliary disease seen and no signs of meningitis, although one case has positive culture of spinal fluid.

ROBINSON:⁷

Alternate study of children with tuberculosis treated with SM, PAS, or INH. All infants below one year were treated.

One to three years—Seventeen treated with no complications.

Eighteen not treated and six developed complications.

Three to ten years—Seventeen treated with two cases of atelectasis occurring.

Seventeen not treated and three had complications.

None followed long enough to observe late sequelae or whether INH was more effective in preventing meningitis than streptomycin.

MEYER⁸

Infants with positive tuberculin and without x-ray evidence of tuberculosis give INH 8 mgm/kilo/d for six months, then reduced to 4 mgm/kilo/d for three months.

CHOREMIS:¹⁰

Children over three years with positive skin test and negative chest x-ray; no drugs.

Complications of primary tuberculosis seem reduced with antimicrobial drugs. It is interesting that Robinson⁹ reports four patients all under two years with positive skin reaction, and normal roentgenograms of the chest treated with INH alone in dosage of 8 mgm/kilo/d that became tuberculin negative after six to seven months of therapy. Two patients of this type remained positive and seven with abnormal chest x-rays remained positive at least after seven months of INH treatment. Conflicting reports by others particularly concerning tuberculin sensitivity after treatment in adults exist.⁹ What the susceptibility of the negative reactor is after conversion from positive is not yet known. In guinea pigs it has been shown that a loss of tuberculin sensitivity does not rob the animal of all its acquired protection.¹¹ On the other hand, Peizer says, "The early administration of enormous doses of INH cannot be depended upon to eradicate a tuberculosis infection, to prevent the rapid emergence of drug-resistant tubercle bacilli, or safely to permit the development and maintenance of a high degree of acquired immunity in guinea pigs."¹²

I would like to quote Dr. Debre in closing.¹³ "The important problem at present is whether all cases of primary tuberculosis whether latent or not should be treated as soon as they are recognized. It is extremely difficult to answer this question. Further studies are required, but as long as the problem has not been settled, physicians must decide in each case, well aware that they are assuming as heavy a responsibility in deciding not to treat a child as they do when they prescribe antituberculous drugs."

Summary

1. Complications in tuberculin converters may be high.

2. Age of conversion may have some bearing on one's thinking in management.

3. Therapy should include INH, particularly in infants, and should be carried out for at least eight to ten months and perhaps longer.

TUBERCULIN CONVERTER / Bellamy

4. What the ultimate fate will be of the treated case and the fate of those converted from positive to negative will have to await the passage of time.

842 Greene Street

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MORE NURSING HOMES URGED FOR 1959

SPEEDING UP OF the construction of nursing homes for the aged and for patients with long-term chronic illnesses is being urged by the Georgia Department of Public Health for 1959.

The Department's plans for hospital and medical facility construction for 1959 have been approved by a special session of the State Board of Health prior to final submission to the Surgeon General, U. S. Public Health Service.

The federal Hill Burton Act of 1946 and the Medical Facilities Act of 1954 require a yearly survey of hospital needs in the State, with a construction plan to be submitted to the U. S. Public Health Service for approval. A public hearing was formerly required, but present regulations call for announcement of the plan to the press. Copies are available from the Division of Hospital Services, Georgia Department of Public Health, Atlanta. Reasonable suggestions for change will be included in the plans for the following year.

Federal and state funds are made available to communities in Georgia under the plan, which sets up rules, regulations, and priorities.

"Since Georgia lags far behind in providing hospital care for long term patients and nursing homes for the aged, we would like to see more non-profit organizations such as churches and fraternal organizations sponsor nursing homes in their communities. Although there is no state money presently available for this type construction, federal money to match local funds is available," according to Dr.

Thomas F. Sellers, Director of the Georgia Department of Public Health.

"Unfortunately very few applications have been received for federal construction grants. There has not been enough organized community interest and financial support for these greatly needed facilities and services for the aged," he said.

An inventory made this spring by the Department shows that Georgia has only eight per cent of the chronic hospital beds needed and only 21 per cent of the nursing home beds needed. The construction of nursing homes has been especially slow, and high priorities for their construction are being offered to sponsors.

"The hospital and medical facilities construction program has been very successful in our State," said Dr. Sellers. "This has been a joint state, federal, and community type program with a minimum of federal and state control." Dr. Sellers emphasized that although many long-term patients are receiving some type of care, it is too often in expensive general hospitals or in unsafe or poorly staffed nursing homes.

According to the 1959 State Plan, construction requirements in Georgia have been met in the following percentages; general hospitals, 73 per cent; nervous and mental, 62 per cent; chronic illness, 8 per cent; nursing homes, 21 per cent; rehabilitation centers, 42 per cent; and public health centers 66 per cent. Public health center construction receives 12½ per cent of federal construction funds.

REPORT OF MEDICAL-LEGAL CONFERENCE, CHICAGO, ILLINOIS, MAY 9-10, 1958

J. FRANK WALKER, M.D., *Atlanta*
Chairman, MAG Committee on Legislation

A LEGAL CONFERENCE for Attorneys, Executive Secretaries, and Physicians was sponsored by the Law Department of the American Medical Association, May 9 and 10, 1958 at the Drake Hotel, Chicago.

This is a brief report of the significant topics discussed at the meeting. A complete transcript of the conference will be available at a later date.

A full day was devoted to the legal aspects of medical practice through "third party" mechanisms, including hospitals, closed panels, medical schools, and management and union health plans. That we must eliminate the financial and commercial relationships between hospitals and physicians was a strong point made by one lawyer. He suggested that this must be carried even to the point of the doctors, rather than the hospitals, employing interns and residents. The hospitals, whether for profit or not, must not engage in the corporate or lay practice of medicine.

As more and more people believe the right to medical care is God-given, more closed panel groups such as one organized and managed by a lay group in New York will appear. Panel plans are with us. Medicine must bend and beat the panel plans by offering a better solution. The lawyers believe that medicine must somehow accommodate and compromise or, in the future, we will be stuck with the Government as the third party. We must learn to live with social economic changes. Health and welfare funds, such as that of the United Mine Workers of America, actually provide for the lay control of doctors. The patient is denied his free choice of physician. A plan must be developed which will insure the best quality of medical care to the third party beneficiaries which is reasonable and fair to the funds and to the doctors.

Enthusiastically received at the Conference was a full discussion of how organized medicine in Georgia resolved its problems to medical schools and the

practice of medicine. This was presented by Mr. Francis Shackelford, Special MAG Attorney.

In a legal action brought against a mid-western county medical society for alleged violation of the Sherman Anti-Trust Act, because of allegedly wrongful refusal of the medical society to admit a physician to membership, the Supreme Court held that it was without jurisdiction in the matter.

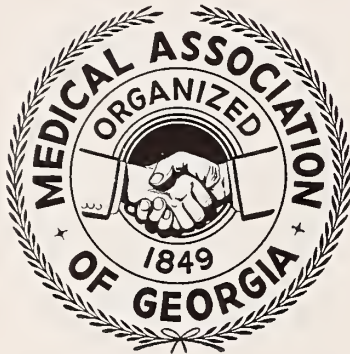
The second day of panel sessions began with the results of a national survey on professional liability conducted by the AMA Law Department. Of all doctors alive and in active practice, 14 per cent have had a claim or suit in malpractice. The rate was one out of four in California, but only one in 33 in South Carolina. Half of the suits involved full time specialists. The lawyers felt that nearly all the claims were preventable.

There is a strong tendency in at least one state to sue doctors for assault and battery or breach of contractual agreement, rather than for negligence. Negligence must be proved in court, but, in the others, no expert medical testimony is needed.

The California Medical Association has recently approved a plan for the establishment of professional liability medical panels. The purpose of the plan is to make a panel of physicians available for consultation and as witnesses in cases of alleged medical malpractice. No longer can the courts claim the existence of a conspiracy of silence by doctors. Perhaps the doctrine of *res ipsa loquitur* (the thing speaks for itself) will be utilized less often in malpractice suits. Many jurists believe that the extensive use of this doctrine was an attempt to equalize justice when doctors maintained silence. In California, physicians are now available for consultation with attorneys for pre-suit expert opinion and for possible testimony as expert witnesses in cases of alleged medical malpractice. From early experiences with the plan, fewer actions in malpractice are anticipated.

1959 Annual Session

May 17-20, 1959—Bon Air Hotel, Augusta, Georgia



First Call for Scientific Papers

All titles must be submitted to the respective
program chairman listed below before
November 1, 1958.

ANESTHESIOLOGY

A. J. Waters
University Hospital, Augusta

CHEST

Curtis H. Carter
Medical College of Georgia, Augusta

DERMATOLOGY

J. Malcolm Bazemore
1467 Harper Street, Augusta

DIABETES

Nathan DeVaughn
124 Seventh Street, Augusta

EENT

William O. White
1467 Harper Street, Augusta

GENERAL PRACTICE

C. M. Templeton
1333 Harper Street, Augusta

INDUSTRIAL SURGERY

Augustin S. Carswell
1407 Gwinnett Street, Augusta

MEDICINE

Harry T. Harper, Jr.
Medical Arts Building, Augusta
Louis L. Battey
1407 Gwinnett Street, Augusta

OBSTETRICS AND GYNECOLOGY

John T. Persall
1407 Gwinnett Street, Augusta

ORTHOPEDICS

Augustin S. Carswell
1407 Gwinnett Street, Augusta

PATHOLOGY

E. V. Hastings
St. Joseph's Hospital, Augusta

PEDIATRICS

W. A. Wilkes
1453 Harper Street, Augusta

PSYCHIATRY-NEUROLOGY-NEUROSURGERY

E. J. McCranie
Medical College of Georgia, Augusta

RADIOLOGY

Russell Wigh
Medical College of Georgia, Augusta

SURGERY

Robert G. Ellison
Medical College of Georgia, Augusta

UROLOGY

Robert Rinker
Medical College of Georgia, Augusta

HEALTH COLUMN FOR WEEKLY NEWSPAPERS

AS THIS ISSUE of the Journal goes to press, one hundred weekly newspapers in Georgia have published one or more of the MAG's new, weekly health column called "Doc MAG Says." Begun in April, the columns are mailed to all the state's weeklies every Monday for publication the following week.

Topics of the columns cover a variety of health subjects of interest to the general reader, such as: "Headache," "Nervousness," "If You're Too Fat, Quit Eating So Much," "Traffic Accidents," "Immunization," etc. Each article is published under a one-column or two-column head as shown below.



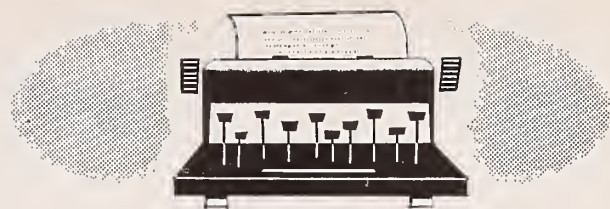
There are approximately 90 more rural weekly newspapers which have not yet started to make use of this service, furnished free to them each week by the M.A.G. *If your local editor is not running "DOC MAG SAYS" regularly, please urge him to do so.*

Purpose of the column is to provide accurate and authoritative health information to rural Georgia. It was originally conceived by Dr. J. Lee Walker, former Chairman of the MAG Rural Health Committee, and is patterned after similar programs in other states.

The successful implementation of the project has been made possible by one of the hardest working committees in MAG history. The Health Column Committee, headed by H. C. Derrick of Lafayette, held ten meetings during the first six months of 1958.

Other members of the Committee and their specialty are: Tom C. McPherson, Atlanta, Pediatrics; C. J. Wyatt, Rome, Internal Medicine; Lamar Glass, Atlanta, Surgery; Jule C. Neal, Macon, Obstetrics and Gynecology; August Yochem, Atlanta, Psychiatry; and E. P. Inglis, Marietta, General Practice.

The Committee operates in a unique way. At each meeting four or five topics are discussed from the points of view of the various specialties. An experienced journalist and science writer who is



editorials

present at the meetings takes notes on these topics and submits rough drafts of the columns for final approval at the next meeting.

A large backlog of columns was compiled before the project was initiated through the Georgia Press Association early in April. The first column was used by 30 newspapers and "circulation" has grown each week since then.

Ads were published in the Georgia Press Association's house organ, "Forum," and editors were contacted directly by mail. In addition, local physicians were asked to speak to their editors in behalf of the health column.

It is hoped that the column will prove of high reader interest, help to inform the general public, and also boost circulation for the newspaper that is featuring it.

Your cooperation is earnestly solicited in helping to make this MAG project a complete success. Please urge your local paper to make use of "Doc MAG Says."

SEATBELTS AND SURVIVAL

IN THIS AGE of supersonic speeds and overpowered automobiles, it behooves us all as individuals—and more particularly as doctors—to do what we can to help lower the death toll on our highways. We have been privileged in recent years to practice effective preventive medicine in widely divergent areas. Automobile safety should be no exception. Through the sponsorship of the M.A.G., automobile safety stickers have become more and more in evidence on our highways and their influence has been widely felt. While sane driving for all is the ultimate goal of any automotive safety program, we are all

aware that many individuals who drive conservatively and carefully have innocently met death on the highway as a result of the recklessness of other motorists.

The use of seat belts has long been accepted as a necessary safety precaution for occupants of both civil and military aircraft. Exhaustive and well controlled studies have confirmed their effectiveness in the prevention of fatal injuries in those situations of sudden deceleration accompanying aircraft crashes. More recently these principles have been confirmed and extended to the area of automotive crash injury research. The most notable of these research efforts has been by the Department of Public Health and Preventive Medicine of Cornell University. These investigators have utilized data from actual highway accidents supplied for research purposes by state police and physicians in twenty-two states during the past three years. In their considered opinion there is no better single device available at the present time for reducing the risk of injury and death when automobile accidents occur. A careful evaluation of their data reveals impressive results which are highly significant from a statistical point of view.

Since the beginning of time, innovation has provoked lively disagreement. Seat belts in automobiles have been no exception. Safety, like law or medicine, works for the majority. Properly conceived, it is necessarily based on the observation of occurrences which are common rather than exceptional. We do not bypass the use of a drug which may in rare circumstances cause death, nor do we reject laws because they sometimes miscarry. Similarly, we cannot cast aside protective safety devices because they can be demonstrated to cause harm under exceptional circumstances.

It is true that rare instances (0.4%) have been reported where seat belts were the direct cause of internal injuries to wearers in accidents. On the other hand, among more than 15,000 non-users of seat belts in injury producing accidents, 225 or 2.5 per cent sustained dangerous or fatal lower torso injuries.

The greatest area of improvement is offered by the seat belt in its role of preventing ejection, in addition to reducing the severity of injuries inside the car. Ejection has been observed to be the most hazardous aspect of automobile accidents studied through the years.

No restraining device will prove to be a panacea, a cure-all, or a never-fail solution for all accidents. The seat belt, however, does show promise of providing a sound, effective way of reducing one of

our greatest public hazards. The above-mentioned research data is available to all. We owe it to our patients and to the general public to disseminate these facts about seat belts.

Ref: Seat Belt Hearings in the U. S. House of Representatives, August 8, 1957, published by Department of Public Health and Preventive Medicine, Cornell University, 316 East 61 Street, New York 21, New York.

TALMADGE HOSPITAL

THE AGREEMENT REACHED on the controversial Talmadge Hospital issue during the Annual Session in April of this year is already proving itself to be one of the most satisfactory documents of its kind ever drawn up. The medical profession in Georgia and the Medical College of Georgia alike have gained stature through this long awaited agreement.

Provision was made for a liason committee to be composed of one representative from each congressional district, an executive committee composed of two members from the Richmond County Medical Society, two members from the Medical College of Georgia, and one member from the Medical Association of Georgia residing outside Richmond County to be chosen by the Council of the Medical Association of Georgia. These representatives have already been appointed and plans are going forward for their first meeting in the fall. The committee members are as follows:

1. J. M. Bnye, Waynesboro
 2. Walter P. Rhyne, Albany
 3. Henry H. Boyter, Columbus
 4. J. R. Turner, LaGrange
 5. Lamar B. Peacock, Atlanta
 6. Milford B. Hatcher, Macon
 7. R. W. Fowler, Marietta
 8. Robert A. Pumpelly, Jesup
 9. A. A. Rogers, Commerce
 10. Stewart D. Brown, Jr., Royston
- Richmond County Medical Society, Gordon M. Kelly—one year; A. J. Waters—two years
Medical College of Georgia, Harry B. O'Rear, Augusta; Edgar R. Pund, Augusta
Medical Association of Georgia, W. B. Schaefer, Toccoa

The projected plans of the liason committee are encouraging and will be followed with great interest. Even more encouraging are the individual expressions of satisfaction with and faith in the overall agreement as voiced by members of the Richmond County Medical Society, the Staff of the Medical College of Georgia, as well as members of the Medical Association of Georgia in all parts of the state.

These expressions of mutual trust represent the essence of the agreement and will assure the continuation of a cordial relationship between the Medical College of Georgia and the practicing physicians within the state.

HILL-BURTON

HOSPITAL PROGRAM IN GEORGIA

THAT THE HILL-BURTON Hospital Act will be continued by the present Congress seems a forgone conclusion at this time and, in fact, all indications point to it as a permanent addition to our semi-socialistic governmental structure. Faced with this fact, the American Medical Association has had one of its committees study the effects of the Hill-Burton Hospital Construction Act since its beginning in 1946 and to make recommendations regarding more efficient utilization of these funds in the future.

Briefly, the findings of this Committee as presented to the House of Delegates at the San Francisco sessions are as follows:

1. *It is recommended that the Hospital Survey and Construction Program should be continued, although its objectives should be redefined and certain changes made to render it more effective.* Since its beginning the objective of the Program has been to give "... special consideration to hospitals serving rural communities and areas with relatively small financial resources." For the most part this objective has been achieved. Emphasis now needs to be directed toward modernization, renovation, and remodeling of existing hospitals and the construction of facilities in the suburban fringes of metropolitan areas. To provide this emphasis it will be necessary to give the state greater latitude in establishing priorities and allocating funds. *Therefore, it is recommended that the states be permitted to establish priorities in accordance with their individual needs.*

2. *It is recommended that all categorical grants be eliminated, permitting the states to allocate funds to the various types of hospital and medical facilities according to their needs.* These categorical grants, as provided under the 1954 (Wolverton) amendment, have not improved the effectiveness of the program and are unnecessary. Even with the elimination of categorical grants there still remains the listing of types of facilities for which grants can be made.

Therefore, it is recommended that the term, diagnostic or treatment center, should be eliminated from any listings in the Act. There is little evidence of a need or demand for special provisions to build diagnostic or treatment centers. Moreover, the definition of the term, "diagnostic or treatment center," is vague in both the Act and the regulations, and there is much confusion as to what the term means. With few exceptions, all of the projects approved under this category could have been built *without* these special provisions in the Act.

3. *It is also recommended that the term, public health center, be eliminated from any listings in the Act.* Since most states have provided for public health center construction through appropriate local and state tax resources, it is doubtful that continued emphasis for the benefit of a few states is justified.

4. *It is further recommended that the Hill-Burton Program should be expanded to provide for long-term loans at low interest rates for the construction or renovation of hospitals and nursing homes.* Such a loan provision would provide an economical supplement to the present grant program. It would be especially important for projects for which the sponsors do not need grants but do require financing assistance. In addition, such a loan program would offer acceptable assistance to institutions which, as a matter of policy, have refused Hill-Burton aid despite eligibility.

5. *It is further recommended that the Surgeon General be requested to appoint a physician, in private practice, as a member of the Federal Hospital Council and that this physician be selected from a list submitted by the American Medical Association.* The physician in private practice continues to be the key figure in medical care for the people. It is inconceivable that his advice would not be helpful to a program providing facilities for the care of the sick. To date such representation has not been accorded the medical profession.

6. *Finally, it is recommended that each state medical association take steps to obtain adequate representation on its own state hospital advisory council.* In a number of states it was noted that the medical profession was not active in such matters even though Federal regulations provide for such representation.

The foregoing recommendations are those which the study has shown to be desirable and are based on facts disclosed by the study and opinions expressed by persons familiar with the program. These

changes provide for greater freedom to the states and more active participation by the medical profession. They recognize a shift in need from emphasis on rural hospital and medical facilities, resulting in part from the program's accomplishments, to modernization and construction of facilities in urban and suburban areas. Adoption of these recommendations will make the program more adaptable to the needs in each state.

In Georgia there has been a minimum of ineffic-

ency in this Act, and at the same time the state has received a lion's share of these funds so it can now be said that a modern hospital is less than an hour away from any citizen who needs medical care. The Hospital Relations Committee of the MAG finds itself in substantial agreement with the six points of the AMA report and endorses them to Council and your House of Delegates for implementation in Georgia. It is encouraging to note that the State Board of Health has offered its full cooperation in carrying out these objectives.

David Henry Poer, M.D., Atlanta

THE PHYSICIAN'S ROLE IN THE SOCIAL SECURITY DISABILITY PROGRAM

PETER J. CLINE, M.D., State Medical Consultant, *Atlanta*

DOCTORS, HOSPITALS, INSTITUTIONS, and agencies who have contact with disabled people are frequently asked these days to fill out medical reports in connection with claims under disability provisions of the social security law. Under these provisions, disabled workers 50 to 65 years of age, and the disabled dependent sons and daughters of retired or deceased workers, may receive monthly disability payments. Disabled workers under age 50 may have their social security records "frozen." This protects the future benefit rights of the disabled worker and his family.

To qualify under these disability provisions, a person must be unable to engage in any substantial gainful activity by reason of a medically determinable physical or mental impairment which can be expected to result in death or to be of long-continued and indefinite duration. A disabled worker must, in addition, have social security credits for work in at least five out of the ten years before he became disabled, including a year and a half out of the three years before his disability began. A disabled child must be both unmarried and dependent, and must have become disabled before his or her eighteenth birthday.

Application under the social security disability provisions are taken by the more than 570 social security district offices, located in communities all over the nation. The social security district office gives the disabled applicant information about his rights, helps him to fill out his application, and to get the proofs and documents he may need to support that application. Under the law, the disabled person is responsible for furnishing, at his own expense, the evidence to show that he is "disabled" within the meaning of the social security law.

His social security district office gives him one or more copies of a medical report form on which this evidence can be supplied. He is asked to take or mail this

form to his attending physician or to a hospital, institution, public or private agency where he has been treated for his disabling condition. This report form, designed as a guide for the reporting physician, lists the kind of medical facts essential for the determination of "disability." However, the reporting doctor is not required to use it; if he prefers, he may make his report in the form of a narrative summary or he may submit photocopies of the pertinent medical records. The completed reports are to be returned by mail to the social security district office (or to a state agency, if indicated.)

By providing a full and objective clinical picture of his patient, the reporting doctor fulfills his responsibility to his patient and, incidentally, expedites the decision. To be of maximum use for the evaluation of a patient's capacity for work, the report should include a history of the impairment, the symptomatology, clinical findings, and diagnosis. Obviously, the reporting physician has an important role in the operation of the social security disability provisions. He is not, however, asked to decide the issue of "disability." The determination as to whether a patient is "disabled" must be made within the scope of the social security law; often it is based on evidence from more than one medical source. Also the determination must take into account factors which are not purely medical—factors such as education, training, and work experience.

After the applicant has filed his claim under the disability provisions and furnished the supporting evidence, his case is forwarded by his social security district office to an agency of his state—usually the state vocational rehabilitation agency. Under agreements between the individual states and the Federal Government, these state agencies make the disability determinations for their own residents.

In the State of Georgia, the agreement with the Fed-

eral Government provides for the division of vocational rehabilitation to make these disability determinations.

The evaluation of disability is made by a "review team" in the state agency. There are at least two professional people on each team. One of the two is a doctor of medicine (a practicing physician who serves with the state agency on a part-time basis); the other is trained in evaluating the personal and vocational aspects of disability. The team must decide whether the applicant is sufficiently disabled to prevent him from engaging in any substantial gainful activity within the foreseeable future.

In many cases it is necessary to write back to the reporting physician because the medical report does not contain enough clinical facts. As a rule, the kinds of medical facts that the attending physician needs in making his diagnosis and in treating his patient are the same as those required to evaluate the severity of impairments in disability programs. However, certain medical facts are more highly significant in disability evaluation than to medical management of the case. To evaluate the effect of the impairment on the individual's ability to work requires the kind of medical evidence that confirms the diagnosis and measures remaining functional capacities of mind and body. By furnishing complete and objective evidence, the reporting physician makes it unnecessary for the reviewing physician to "write back" for additional clinical or laboratory data.

Where the medical evidence initially submitted indicates a reasonable likelihood that the applicant is disabled, but more precise clinical or laboratory findings are needed to arrive at a sound decision, or to resolve conflicts in the evidence, a consultative examination (usually at the specialist level) may be ordered to obtain additional information. Selection of consulting physicians and payment of fees are governed by state practices.

Some doctors feel that they should be reimbursed by the Government for the cost of preparing the medical

reports on their patients, and it is, of course, quite within their prerogative to charge the patient a fee for that service. However, under the law, the Social Security Administration cannot pay that fee; that is the individual's responsibility.

Other doctors are perturbed when asked to complete medical reports for individuals whom they may not have seen for years. In these cases, however, the physician is not expected to describe the present condition of the patient, but his medical condition as of the time he made his last examination. Although the social security disability provisions were made applicable to persons whose disabilities may have begun as far back as 1941, all those with long-standing disabilities must apply before July 1, 1958. After June 1958, therefore, this problem should be much relieved.

Evaluation of Disability

The central purpose of disability evaluation is to determine remaining mental and physical capacities. To determine: (1) what the claimant has left, and (2) what he can do with what he has left.

A realistic evaluation of disability must be based on clinical and laboratory tests of the individual's ability to meet the metabolic demands of activity, to reason, to perceive, and to perform certain basic activities such as sitting, standing, bending, and walking. When incapacity results from severe impairment of one or more such functions, it is essential to establish not only the fact that functional impairment exists, but also its extent.

Loss of function is evaluated on the basis of clinical and laboratory findings after maximum benefit from treatment. Clinical information concerning nature and response to treatment furnishes information on stability of functional capacity.

Guides to the evaluation of disability have been devised by a Medical Advisory Committee composed of recognized specialists in various medical fields who are not connected with the government.

AMA PRODUCES NEW FILM ON FOOD QUACKERY

HOW MODERN "MEDICINE MEN" dupe the public into spending millions of dollars on unnecessary or overpriced nutritional products is the story unfolded in a new American Medical Association film. Prepared especially for airing over local television stations under the auspices of local medical societies, this new 27-minute film—"The Medicine Man"—dramatically pinpoints the fight against quackery in the food and nutrition field.

The film singles out problems which stem from health lecturers who travel from town to town giving misinformation on nutrition as a tie-in to plugging their

products of questionable merit, and from door-to-door salesmen who misrepresent the value of nutritional products. The film also shows how the medical profession cooperates with the Food and Drug Administration and voluntary agencies such as the National Better Business Bureau in the crackdown on these food quacks.

First showing of the film will be at the AMA's Public Relations Institute August 27-28 at the Drake Hotel, Chicago. Prints will be available to local medical societies after September 15 from the AMA TV Film Library.

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THE MONTH IN WASHINGTON

FOR THE FIRST TIME since the idea was proposed more than seven years ago by President Truman and Oscar Ewing, legislation to tack a hospital and medical service program onto social security has received a thorough airing before a Congressional committee.

For 11 days the House Ways and Means Committee listened to testimony on this and other suggested changes in the law. The hospitalization plan—now identified as the Forand bill, for its sponsor, Rep. Aime J. Forand (D., R.I.)—was by far the most controversial issue. It came up repeatedly and each time was the signal for either sharp questions or praise from Mr. Forand, depending on what the particular witness thought about the bill.

At the end of the hearings, it appeared that a majority of the committee was not inclined to press for enactment of the Forand bill, although there remained the possibility of sentiment change. At this writing, the prospect is that a bill may be enacted to raise both social security and old-age assistance payments, with a \$600 increase in the amount of taxable salary or self-employment income to meet the extra OASI cost; public assistance payments came out of general revenue.

What did the Forand hearings produce?

For one thing, the proponents and opponents lined up in columns to be identified. The one important exception was the American Hospital Association. The AHA specifically opposed the Forand bill "at this time," but left itself room for maneuvering.

The hospital witnesses, Ray Amberg, president-elect of the AHA, and Dr. James P. Dixon, chairman of its committee to study health needs of the aged, said their conclusion was that federal help of some sort was needed to finance the health care of the aged, and that the social security approach might be the ultimate decision.

However, for the present the hospital spokesmen proposed that the Ways and Means Committee set up a special advisory committee—health personnel and others—to bring together all information on the health problems of the aged, study the data, and make recommendations to the committee before January 1, 1960.

American Medical Association led the parade of opponents of the Forand bill, and its witnesses, Drs. Leonard Larson, a trustee, and Frank Krusen of the Mayo clinic, were subjected to close but not unfriendly questioning by Mr. Forand.

At one point Dr. Larson, the new chairman of the AMA Board of Trustees, told Mr. Forand: "As chairman, I shall devote all my energies to solving this problem and other problems of medical care plans in general. This is my primary interest. I rise or fall on what happens in this field."

Lined up with the AMA in opposing the Forand plan (in addition to the AHA) are the American Dental Association, Blue Shield, the insurance industry in general, the U. S. Chamber of Commerce, and a number of other business and professional groups.

The AFL-CIO appears to be the backbone of forces working for the Forand bill. Labor's spokesmen, however, have the backing of several welfare organizations (plus the Illinois and Massachusetts welfare directors), the American Nurses Association, and the Physicians Forum, among others. The latter group also informed the committee that it favors compulsory social security coverage for physicians.

Notes

A highlight of a testimonial luncheon for Surgeon General Burney was the first public appearance of Dr. Gunnar Gundersen as new AMA President. Dr. Gundersen praised Dr. Burney as a public health officer and as a government official who did not lose contact with the private medical community. The affair was in recognition of Dr. Burney's election as president of the World Health Assembly.

* * *

For the time being, neither doctors nor hospitals will have the exclusive radio frequencies they are attempting to obtain. They were temporarily turned down by the Federal Communications Commission in one category, but will continue their efforts to obtain the frequencies for emergency as well as day-to-day communications.

* * *

It was late in the session before Congress indicated it would continue the Hill-Burton program; legislation virtually certain of enactment would extend the operation for three years, and authorize long-term loans to non-profit sponsors who for religious or other reasons do not want federal grants.

* * *

Internal Revenue Service has ruled that physicians on full-time staff basis with hospitals do not have to include their U. S. income tax returns money received from patients, when the checks are indorsed over to the hospital.

* * *

While avoiding "campaigning against smoking," the U. S. Public Health Service is going to pass on to the public all the information it has on the subject. Its most recent effort in this direction was release of a report, based on studies of 200,000 veterans, that showed a much higher death rate for "cigarette only" smokers.

HOSPITAL PURCHASERS INVITED TO COURSES

HOSPITAL PURCHASING AGENTS and administrators in Georgia and neighboring states are invited to attend a one-day free institute in October.

The institute will provide special instruction on perpetual inventory systems, and is one of the first of this type to be held. It is conducted by the Georgia Hospital Association and the Division of Hospital Services, Geor-

gia Department of Public Health. It will meet from 9:00 a.m. to 4:00 p.m. at Pineview General Hospital, Valdosta, October 16.

To enroll, write to the Georgia Hospital Association, Room G, 2025 Peachtree Rd., N.E., Atlanta, or register at the meetings.

STAPHYLOCCAL INFECTIONS

THOMAS F. SELLERS, M.D., State Department of Public Health

AS THE MEMBERS of the Medical Society of Georgia know, the problem of staphylococcal infections in hospitals has recently attracted considerable attention. While some of the expressed concern may be unwarranted, at least two problems with *S. aureus*, phage type 52/52A, have occurred to date in Georgia.

In order to assist hospitals and physicians with the detection and management of staphylococcal problems, the Laboratory of the Georgia Department of Public Health is undertaking to create facilities for phage typing.

These facilities will necessarily be limited and can be used efficiently only in circumstances in which a preliminary epidemiologic examination indicates that an acute or sub-acute problem has developed. For this reason, it is asked that inquiries concerning this problem and requests for aid in typing staphylococci be referred to the Department's Division of Epidemiology. Through this Division, aid can be provided in determining the scope as well as the nature of a suspected problem.

Briefly, hospital problems seem to develop in four phases. These are:

- 1—An excessive number of staphylococcal infections occur in hospital personnel and patients.
- 2—Natural selection of invasive and resistant strains occurs through continued exposure to antibiotics and multiple infections with a few strains can be noted.
- 3—One strain develops increasing virulence or anti-

biotic resistance and becomes established as a "hospital strain."

- 4—Resistant strains may be transferred to other hospitals with transfer of patients and occasionally personnel. Nasal carriers are of less importance in this respect, and within a hospital group, than patients or personnel with furunculosis or superficial infections.

It is therefore highly desirable that each hospital establish an Infection Committee as has been recommended by the American Medical Association, the American Academy of Pediatrics, and other groups. It is further desirable that such committees be informed of the interest and facilities of the Department of Health.

The Department can type or procure typing of organisms isolated from fatal infections and can, as indicated above, assist with investigations of multiple infection. If facilities exist for the isolation of staphylococci and for coagulase testing, it is highly desirable that these preliminary steps be taken. However, cultures from the patient can be accepted when hospital laboratory facilities are not suitable for isolations or tests.

It should be emphasized again that typing of specimens should not be requested until a thorough epidemiologic inquiry has been made and that all questions relating to such investigation should be directed to the Division of Epidemiology.

OVER 7,000 NEW PHYSICIANS LICENSED IN U. S.

FOR THE FIFTH consecutive year more than 7,000 new physicians entered the practice of medicine in the United States during 1957.

This was revealed in the 56th annual report of the American Medical Association's Council on Medical Education and Hospitals.

Of the 7,455 new doctors licensed to practice, 5872 licenses were given as a result of written examination and 1,583 by interstate reciprocity or endorsement of credentials.

During the same period, 3,500 physician deaths were reported, which reduces the over-all gain in the doctor population to 3,955.

In all, state and territorial boards issued 15,090 licenses during the year but 7,635 went to doctors already holding licenses from another state or to men who took examinations in more than one state.

The total number of licenses issued, both by written examination and reciprocity or endorsement of credentials, represents an increase of 547 over 1956.

During the year there were 9,116 applicants for

licensure by written examination. Of these, 7,769 passed and 1,347 failed.

Included among those who took the examination were 6,244 graduates of approved medical schools in the U. S.; 185 from approved schools in Canada; four graduates of approved schools in the U. S. which are no longer in operation; 2,299 from foreign medical faculties; 42 graduates of unapproved medical schools in the U. S. no longer in existence, and 342 graduates of schools of osteopathy.

Three medical schools had graduates for the first time during the period. They were the University of Missouri, University of Saskatchewan, and the University of Mississippi. All of the graduates of the Mississippi school passed their written examination.

The number of licenses issued on the basis of geographical areas were: New England, 459; Middle Atlantic, 1,718; East North Central, 1,466; West North Central, 708; South Atlantic, 1,262; East South Central, 480; West South Central, 751; Mountain, 147; Pacific, 380, and territories and possessions, 104.



abstracts by georgia authors

Corpe, R. F., and F. A. Blalock, Battey State Hospital, Rome, Georgia, "The Fate of the Patient with Persistent Cavitation and Non-infectious Sputum ("Open-Negative") after Discharge from the Hospital," *Am. Rev. Tuberc. & Pul. Dis.* 77:764-777 (May) 1958.

Between July 1, 1953 and December 31, 1956, 159 patients with cavitary disease, negative sputum, and pulmonary lesions stable on roentgenography were discharged from Battey State Hospital and continued on drug therapy. These patients were predominantly non-surgical candidates because of the extent of their disease. However, 37 had refused surgery.

A follow-up completed on these patients in May of 1957 revealed: (1) A mortality rate of 3.8 per cent—six patients had expired, one from extensive burn, one from cerebral hemorrhage and four from cardiac disease. None had had a reactivation. (2) The relapse rate was 8.8 per cent—11 patients (seven per cent) had bacteriologic relapse and three had X-ray or clinical worsening without bacteriologic relapse. (3) Thirteen of the 14 reactivations were in males. (101 males—58 females discharged.) (4) Only two per cent of the patients were confined to their homes because of physical disabilities. Forty-five per cent of them had unlimited activity. Twenty-five per cent of them were working full time.

Careful long-term follow-up observations on patients in this category are of extreme importance.

Vogler, William R., Garland D. Perdue, and Sam A. Wilkins, Jr., Emory Hospital, Atlanta 22, Georgia, "A Clinical Evaluation of Malignant Melanoma," *Surg. Gynec. & Obst.* 106:586-594 (May) 1958.

Two hundred and fifty-three patients with the diagnosis of malignant melanoma were seen at the Robert Winship Memorial Clinic from 1936 through 1956. Review of the records revealed no etiological factors of significance but 32.4 per cent had received improper initial treatment.

Treatment has consisted of wide excision, and skin grafting of local le-

sions. Regional lymph node dissections are done when metastases are limited to these areas. When the primary lesion is adjacent to the regional lymph nodes, an in-continuity procedure, that is, removing the primary lesion and lymphatics en bloc, is done. So-called "prophylactic" regional node dissections have been done since 1951, but only in those lesions so situated as to have a definite relationship to a single regional lymph node area.

Ninety-five patients were treated five or more years ago and forty-three of these over ten years ago. None were lost to follow-up. The ten year survival rate is 26 per cent. The ten year definite cure rate, that is excluding those dead of other causes, is 31 per cent. The five year rates are 47 per cent and 41 per cent for survival and definite cures respectively.

Significantly more women were cured than men. This held true regardless of the stage of disease, location or size of the lesion, and the presence of ulceration.

Patients with superficial melanomas survived longer than those having lesions invading the dermis. Other factors favoring a good prognosis are early stage of disease, absence of ulceration, and location on the upper extremity.

Burrell, Zeb L., William C. Gittinger, and Alberto Martinez, Medical College of Georgia, Augusta, Georgia, "Treatment of Cardiac Arrhythmias with Hydroxyzine," *Am. J. Cardiol.* 1:624-628 (May) 1958.

Hydroxyzine (Atarax) was used in the treatment of fifty patients with various cardiac arrhythmias with excellent results in thirty cases, the drug restoring and then maintaining normal sinus rhythm. Results were considered to be good in another six patients with a decrease in frequency of their ectopic beats by at least seventy-five per cent. The arrhythmias most responsive to therapy were ventricular extra-systoles, auricular extra-systoles, paroxysmal ventricular tachycardia, and paroxysmal auricular tachycardia. This drug was generally ineffective in the conversion of auricular fibrillation with only four

cases of sixteen being successfully controlled.

This drug was found to be safe, easily administered, and non-toxic in all cases. No untoward effects occurred in any patient when the drug was given either orally, intramuscularly, or intravenously. This would seem to be a definite advantage over other agents in use for this general purpose. Dosage used varied considerably ranging from 30 mg. to 400 mg. daily in divided doses with an average of approximately 100 mg. per day in divided doses. We feel that further study of the use of hydroxyzine as an anti-arrhythmia agent is definitely indicated.

Galambos, John T., Emory University School of Medicine, Atlanta 22, Georgia, "Urinary Excretion of Coproporphyrin by Children During and After Acute Streptococcal Infections," *Pedia.* 21:722-730 (May) 1958.

The etiologic relationship between acute Group-A beta-hemolytic streptococcal infections and subsequent attacks of rheumatic fever is well known. The association between active rheumatic fever and coproporphyrinuria is well established. The question is whether disturbed porphyrin metabolism during or following an acute streptococcal infection is characteristic of the development of acute rheumatic fever.

The present study was undertaken in order to obtain quantitative 24-hour urinary coproporphyrin (UCP) determinations in children with acute scarlet fever in an epidemic, during and following sporadic streptococcal pharyngitis, and to compare their UCP excretions with a group of children having acute non-streptococcal "viral" pharyngitis.

Antibiotics, usually penicillin, were administered to each patient.

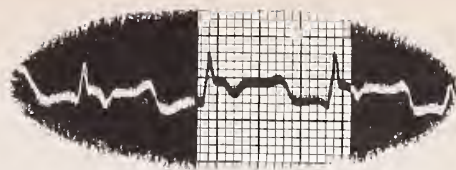
Urine was collected and preserved and the UCP was analyzed according to the method of Schwartz, Zieve, and Watson.

The scarlet fever group consisted of 88 children hospitalized in Providence, Rhode Island during an epidemic in the spring of 1957. Twenty-four hour single urine was obtained for UCP determination in each case during the first or second week of their illness.

Fifty-four children were in the group with sporadic streptococcal pharyngitis. These patients were seen by their private pediatricians in Atlanta, Georgia. The 24-hour UCP excretions were measured during the acute illness and in weekly intervals thereafter in each case.

None of these children had a previous or subsequent attack of acute rheumatic fever. Their UCP excretion was not elevated as compared to a group of 21 children with non-streptococcal pharyngitis.

Between the ages of four to 12 years the UCP excretion of boys is higher than that of girls in the same age group. This difference is significant to the one per cent level.



heart page

NON-CARDIAC CHEST PAIN

W. DERREL HAZLEHURST, M.D., *Macon*

ACCURATE DIAGNOSIS of conditions producing chest pain is sometimes easy, often difficult, and occasionally impossible. A massive acute myocardial infarct usually can be recognized easily and readily confirmed by classical electrocardiographic changes. Typical angina of effort likewise may be easy to recognize, but often more difficult to confirm. Often, however, the clinician encounters pain which is not typical in its behavior and associated clinical findings which make its cause difficult to recognize.

When confronted with a patient with chest pain, the importance of early and accurate diagnosis is occasioned not only by the gravity of pain resulting from coronary disease but also, and perhaps even more important, by the relief from anxiety and fear which can sometimes be afforded by determining that the pain is not of cardiac origin but is related to some relatively benign condition.

This decision is not easy and must not be made lightly. One must carefully review the history, considering all of the characteristics of the pain. Its manner of onset, duration, location, radiation, and type, or how it feels, must be carefully reviewed. The conditions that lead to its occurrence must be analyzed as well as the measures which tend to relieve it. Finally, one should evaluate the individual as a whole. Does he have a family tendency to heart disease? His age, sex, weight, eating habits, life

stresses, fears, drinking and smoking habits, exercise habits, and previous illnesses all need to be considered.

Physical examination may reveal valuable clues, but often contributes relatively little. The electrocardiogram may supply valuable additional information. It is to be emphasized that this valuable tool should never be abused by using it alone to decide about the origin of chest pain. Positive findings must be interpreted in the light of clinical evidence and negative findings should usually be considered to be of little or no help.

Attempts to reproduce chest pain may sometimes afford a positive answer. One may elect to try effort with and without nitroglycerin. One may be able to reproduce the pain by pressure over a costochondral junction, diseased subdeltoid bursa, etc. Having the patient lie flat or with head tilted down after eating may produce pain from a hiatus hernia. Relief of pain by a belch or an enema may be significant. Hyperventilation should always be tried.

X-ray examination for skeletal defects, upper gastrointestinal disorders, or gas in the splenic flexure, as well as for evidence of pulmonary disorders may be diagnostic.

Finally, it should be emphasized that it is not enough to conclude that chest pain is non-cardiac. Intensive efforts to demonstrate the exact origin should always be made.



CANCER OF THE BREAST

A. H. LETTON, M.D. and JOHN P. WILSON, M.D., *Atlanta*

WHILE RESEARCHERS CONTINUE their relentless search for the cause and cure of cancer of the breast, we practitioners must plod on down the path of reality and deal with cancer of the breast as best we can. It is reassuring to note that we seem to be doing a better job these days than a few years ago.

In 1950 we reviewed our experiences with cancer of the breast. Those records represented the patients in the 43 years since Dr. T. C. Davison began our practice in 1907. Several surprising facts were established. We found that 98 per cent of the women knew that they had a lump in their breast before they visited us; we had found only two per cent. We noted, also, that the average size of the breast lesion was gradually decreasing as the years went by, and in the 18 month period prior to our review in 1950, the average size was 6.2 centimeters in diameter. The average length of time it was known by the women to have been present was over three months. We found our over-all cure rate was roughly the same as reported in literature by others. We did note that in all of those 43 years, not a single patient had died of cancer of the breast who had a lesion one centimeter or less in diameter at the time of her admission. We concluded from this experience that it would be logical to expect that over 90 per cent of cancer of the breast could be cured if attacked when the mass was one centimeter or less in diameter. It followed that since the majority of women found these lesions themselves, they were the key to better control of breast cancer. They must be taught, therefore, to do two things—first, examine their own breasts each month so that they can find the lesions earlier, and second, that when they find a lump in the breast, report it to their

physicians immediately. About the time we reached these conclusions, the American Cancer Society simultaneously announced its program on breast self-examination. We, therefore, have been strong supporters of that program. In fact, we felt so strongly that we have written and published a booklet on breast self-examination which has been given to every woman coming to our office during these ensuing years.

Several years have now passed, and it is time that we look back to see if the American Cancer Society program has helped. We again have reviewed our records, and have found that in the last 18 months, the average size lesion is 3.6 centimeters with the median lesion being three centimeters in diameter. The average length of time between the patient's discovering the lesion and her presenting herself is 84 days. The median length of time is 21 days. This certainly can be interpreted to mean that the women are coming when their lesions are younger and less far advanced, and it certainly follows that we should expect a greater number of cures in this group than in the group eight years ago.

We feel that every physician should get strongly behind this program, and push it with all his strength. In the last eight years only 90,000 of the 934,500 women over 15 years of age in Georgia have seen the breast self-examination film. How wonderful it would be if we could get our female population to become devotees of breast self-examination. If they would, the lesions could be found at one centimeter and less, and death from cancer of the breast would become almost a rarity, rather than a common thing.

It is up to us, the physicians of Georgia, and the American Cancer Society to educate our people that their lives may be spared.

Approved by Professional Education Committee, Georgia Division, American Cancer Society, Inc.

MAG COUNCIL MEETING - JULY 12

CHAIRMAN OF COUNCIL George R. Dillinger called the Council of the Medical Association of Georgia to order at 3 P.M., July 12, 1958 at Dr. Fred Simonton's farm, Notnomis Acres, Centralhatchee, Georgia.

Council members present included: Lee Howard, Sr., Savannah, President; George L. Alexander, Forsyth, First Vice-President; Charles W. Hock, Augusta, Second Vice-President; Fred Simonton, Chickamauga, House of Delegates Vice Speaker (for Speaker Thomas W. Goodwin); Chris J. McLoughlin, Atlanta, Secretary-Treasurer; Charles T. Brown, Guyton, First District Councilor; George R. Dillinger, Thomasville, Second District Councilor; Willis P. Jordan, Columbus, Third District Vice Councilor (for W. G. Elliott, Third District Councilor); Virgil B. Williams, Griffin, Fourth District Councilor; J. G. McDaniel, Atlanta, Fifth District Councilor; Henry H. Tift, Macon, Sixth District Councilor; D. Lloyd Wood, Dalton, Seventh District Councilor; F. G. Eldridge, Valdosta, Eighth District Councilor; C. R. Andrews, Canton, Ninth District Councilor and David R. Thomas, Jr., Augusta, Tenth District Vice-Councilor (for Addison Simpson, Jr., Tenth District Councilor.)

Vice Councilors present included: George P. Kinard, Newnan, Fourth District; George Alexander, Forsyth, Sixth District. AMA-MAG Delegate Eustace A. Allen, Atlanta and J. W. Chambers, LaGrange were also present. Troup County Medical Society Secretary Render Turner and C-D-H County Medical Society President Tom Reeve were present as guests. Messrs. M. D. Krueger, Executive Secretary and John F. Kiser, Associate Executive Secretary were also in attendance.

Chairman Dillinger then delivered the invocation.

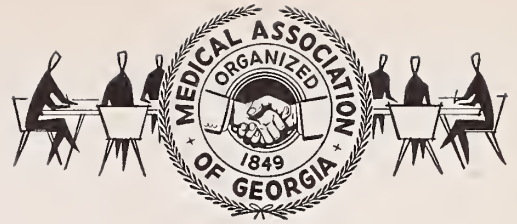
Chairman Dillinger called on Mr. Krueger who read the minutes of the Council meetings of April 26, 1958, April 30, 1958 and June 1, 1958 and the Council Executive Committee Minutes of June 1, 1958. On motion duly made and seconded it was voted that these minutes be approved as read.

Third District Vice Councilor

Mr. Krueger read a letter from the Secretary of the Third District Medical Society informing the Association of the resignation of Third District Vice Councilor, Luther Wolff, and of the society action in naming Willis P. Jordan to fill the vacancy in office of the Vice Councilor of the Third District Medical Society. Mr. Krueger read Chapter Four, Section Five of the MAG Constitution and By-Laws which calls for Council action in filling vacancies between Annual Sessions of the Association and on motion (Wood-Williams) it was voted that Willis P. Jordan, Columbus, be appointed Vice Councilor of the Third District until the next regular Association election held in conjunction with the next Association Annual Session at which time nominations from the district society may be voted on by the membership to fill this unexpired term of office.

Welfare Department Form 115

Virgil Williams presented information about the Georgia State Department of Public Welfare Form DWP 115 "Report on Eye Examination" requiring physicians service. Dr. Williams stated that it was the feeling of some of the membership in his district that this service was rendered for an inadequate fee. On motion



the association

(Wood-Alexander) it was voted to examine the entire fee schedule and recommend to the Welfare Department that this eye examination fee for service be a minimum of \$10 and that the physical examination fee for service be a minimum of \$10 and, further, that this matter be referred by the Chairman of Council to the Association Insurance and Economic Committee for study and revision.

Workman's Compensation Fee Schedule

Chris J. McLoughlin presented a letter from the State Board of Workman's Compensation dated June 20, 1958 which quoted the minutes of the State Board of Workman's Compensation meeting Tuesday, June 17, 1958 in which the Board took the following action on a MAG proposed revised Workman's Compensation Fee Schedule: "... The Board is of the opinion that a general increase in medical fees as submitted is not warranted at this time and therefore does not approve the revised schedule of fees for physicians and surgeons for services rendered under the State of Georgia Workman's Compensation Act as submitted." The Workman's Compensation Board further stated: "It appears that you (MAG) are requesting that the injured employee be accorded the privilege of selecting his own physician, however, with Code Section 114-501 in mind, some questions have arisen, and the Board desires to have in writing, before further considering the same, your Association's full intent of this request." On motion (Eldridge-Hock) it was voted to request the Association Industrial Health Committee to meet with the State Board of Workman's Compensation members and negotiate matters relating to fees and freedom of choice of physician with this Board; the Industrial Health Committee having the power to act on the previously Council approved Schedule of Fees.

1960 MAG Annual Session Date

Chris J. McLoughlin stated that the MAG 1958 House of Delegates adopted a resolution which said "that the MAG set the time of its Annual Session two years in advance." Dr. McLoughlin presented data about the possibility of Columbus, Georgia for the site of the 1960 MAG Annual Session and after discussion it was moved (Eldridge-Tift) and voted to defer action on this matter until the September Council meeting at which time more adequate information on the hotel and eating facilities in Columbus could be obtained. Mr. Krueger was then requested by the Chairman of Council to also furnish possible dates for At-

lanta in 1960 should the Columbus site not prove feasible.

1959 Annual Session Plans

Council Annual Session Chairman Henry H. Tift reported on plans for a July 27th Specialty Society Program Chairman meeting; a July 24th Exhibit Space and Meeting Room meeting; Lectureship scheduling; and possible alternatives to avoid the Monday night "G.P. Night" conflict with the Alumni dinners. Dr. Tift further stated that he would appreciate discussion concerning the AMA representative to be invited to the 1959 Annual Session and by general agreement it was approved that AMA General Manager, F. J. L. Blasingame and AMA President-Elect Lewis Orr be invited to attend and speak at the MAG '59 Annual Session.

C. W. Long Museum Maintainance

Finance Committee Chairman J. G. McDaniel presented the 1958 House of Delegates resolution which stated "that the MAG allot sufficient funds to maintain the museum through the month of September at which time other funds should be available." Dr. McDaniel stated that the Council Executive Committee referred this matter to the Council for action and on motion (McDaniel-Alexander) it was voted to pay sufficient funds to maintain the museum through the month of September, 1958 as instructed by the House of Delegates, but to inform the Crawford W. Long Memorial Committee Chairman that after the month of September the MAG has no authority to pay for museum maintenance.

Council Finance Committee Report

Council Finance Committee Chairman J. G. McDaniel presented the monthly report of Association income and expenditures through June 30, 1958 and on motion duly made and seconded the report was accepted and approved and the Finance Committee Chairman commended.

1958 AMA Annual Meeting Report

AMA Delegates Eustace A. Allen and J. W. Chambers presented a report of the actions of the AMA House of Delegates Meeting held June 23-27, 1958, San Francisco, California which covered the following important subjects dealt with by the House: United Mine Workers of America Welfare and Retirement Fund; Social Security Coverage for Self-Employed Physicians; Relations with Voluntary Health Organizations; Veterans Medical Care; the Medicare Program; AMA Washington Office and Overall Legislative System; Medical Aspects of Hypnosis and Advertising of Over-the-Counter Medications; etc. It was also reported that Dr. Lewis M. Orr, Urologist, Orlando, Florida was chosen unanimously as AMA President-Elect for the coming year.

The two resolutions introduced by the Georgia Delegation at this AMA meeting were reported on as follows:

1—*AMA Board of Trustees Mediation Committee*—Introduced by the Georgia Delegation at the request of the MAG House of Delegates calling for a permanent AMA Mediation Committee to mediate and arbitrate differences between the profession and medical schools. This resolution was defeated, but the Georgia Delegation felt that its purpose had been accomplished in that such a committee could easily be formed by the AMA Board of Trustees for service as requested.

2—*Medicare Indemnity-Type Plan Resolution*—Introduced by the Georgia delegation at the request of the MAG House of Delegates and Council asking that the AMA House of Delegates actively support plans for changing the present full-service Medicare program into an indemnity-type plan for those states so wishing to negotiate such type of contract. While this resolution was defeated, the Georgia delegation felt its purpose had been accomplished in that the AMA House of Delegates reaffirmed its earlier position in stating that a decision on the type of contract and whether or not a fee schedule is included in future contract negotiation should be left to individual state determination. Also reaffirmed was the AMA's basic contention that the Dependents' Medical Care Act as enacted by Congress does not require fixed fee schedule; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fee and fixed fee schedules would ultimately disrupt the economics of medical practice. This report was accepted for information.

GAGP Secretarial Service

Chris J. McLoughlin read a recommendation of the Georgia Academy of General Practice which was initiated at the suggestion of MAG Secretary McLoughlin on a proposed change in the method of payment to the Headquarters Office Staff for secretarial services being performed by the staff. This GAGP motion, taken from the minutes of the GAGP Board of Directors meeting, June 15, 1958 reads as follows: "After discussion on motion (Simonton-Looper) it was voted that a lump sum services payment be made to the Medical Association of Georgia on a monthly basis to net \$210 per month and that this procedure be instituted July 1, 1958 for a six month trial basis period; the GAGP to retain the privilege of returning to the original basis of payment to individual members of the MAG Headquarters office staff if the lump sum services payment procedure does not work out on a mutually satisfactory basis." On motion (McDaniel-Simonton) it was voted that the Council approve and institute this arrangement recommended by the GAGP Board of Directors meeting June 15, 1958 as quoted above.

Headquarters Office Report

Executive Secretary Krueger reported on his election to the Board of Directors of the Medical Society Executives Association and his appointment to the program committee of this Association. Mr. Krueger then reported on the problems concerned with the St. Paul Professional Liability Program; the forthcoming AMA Public Relations Institute to be held August 27-28, Chicago; and a detailed plan for an MAG Committee Chairman Visitation Program. In this visitation program the Executive Secretary would visit the Committee Chairman personally to assist them in evaluating their past, present, and future activity. On motion (Kinnard-

Alexander) it was voted that the Executive Secretary be authorized to initiate this Committee Chairman Visitation Program. Mr. Krueger reported on the activity of the Headquarters Office during the month of June and presented certain aspects of the forthcoming projects undertaken by the Headquarters Office for July.

Associate Executive Secretary John Kiser reported on the MAG weekly Health Columns appearing in 98 weekly newspapers at the present time. Mr. Kiser also reported on certain county medical societies having jurisdictional problems and certain counties in the state having no physicians residing or practicing in that county, which also presents a jurisdictional problem according to the 1958 House of Delegates revision of By-Laws in adding an additional section to Chapter 1 to be known as Section 10, "Jurisdiction." By general agreement it was recommended that this problem be referred to Mr. Kiser and Mr. Krueger for further study and investigation and that the matters be discussed with those societies involved and the Council Committee on Councilor Apportionment and Redistricting. It was requested that after this investigation is conducted a report be made to Council on the matter.

Hospital Committee Report

Hospital Committee Co-Chairman David Henry Poer reported on the Association Hospital Relations Committee meeting held April 13, 1958. Dr. Poer discussed paramedical recruitment, Hospital-Medical Mediation Council, State Board of Health, Hospital Advisory Council, Physician-Hospital Relations, and Professional Standards for Hospitals. Dr. Poer recommended that the Association Headquarters Office employ additional staff to assist the Hospital Relations Committee so that more of this Committee's work can be accomplished. This report was accepted for information.

Council Building Committee Report

Chris J. McLoughlin reported as requested by the Council at their last meeting on the possibility of obtaining an option at the best purchase possible on a building and site presently under consideration, and also presented a report of ways and means of fund raising for the proposed MAG Headquarters Office Building. Finance Committee Chairman McDaniel presented budget figures and other information and general discussion ensued. It was moved (Andrews-Hock) that the Council hereby authorizes the Building Committee to proceed with the purchase of said building at the best possible purchase price not to exceed a named amount and, further, that an intensive fund raising campaign be instituted for the membership. This motion was then approved by a vote of ten to three. It was further moved (Alexander-Thomas) and voted that if the building and site is purchased, the Council immediately appoint a Committee of the Council for the purpose of fund raising. It was recommended that the President of the Fulton County Medical Society be informed of these actions.

Cancer Society Liaison

Enoch Callaway, LaGrange, presented information based on the MAG 1958 House of Delegates recommendation that a closer liaison be established between the officers of the Georgia Division of the American Cancer Society and the MAG Council as regards the professional, educational, and teaching program. After discussion it was moved (McDaniel-Wood) and voted

unanimously that the present system of collaboration and liaison between the Medical Association of Georgia and the Georgia Division, American Cancer Society is satisfactory to Council and, further, that this arrangement be published. It was also moved (McDaniel-Williams) and voted that Council approve the AMA adopted Resolution No. 58, Subject: Voluntary Health Agencies, which reads as follows:

"WHEREAS, the objectives of the principal Voluntary Health Agencies are laudable; and

"WHEREAS, these agencies have a distinguished record of contributions to the health and medical care of the American people; and

"WHEREAS, it is recognized that the continued effectiveness of these organizations in the fields of public education, professional education, and research is dependent upon the retention of their independence and identity; now therefore be it

"RESOLVED: That the House of Delegates reiterates its commendation and approval of the principal Voluntary Health Agencies; and be it

"FURTHER RESOLVED: That it is the firm belief of the American Medical Association that these agencies should be free to conduct their own campaigns of fund raising and public education and to direct programs of research in their particular spheres of interest; and be it

"FURTHER RESOLVED: That the House of Delegates respectfully request that the American Medical Research Foundation take no action which would endanger the constructive activities of the Voluntary Health Agencies; and be it

"FURTHER RESOLVED: That the Board of Trustees continue actively its study of these perplexing problems looking forward to their ultimate solution."

Legislative Committee Report

Eustace Allen and Mr. Kiser presented a Legislative Committee report which was accepted for information. This report covered national legislation, state legislation, and was a report of progress and plans of the committee.

Savannah VA Medical Center and Report of Activity of State Boards

Mr. John Kiser reported on the policy of the Georgia Medical Society in regard to the Savannah VA Medical Center and the actions of the various State Board Meetings which were held in May, June, and July. This report was accepted for information.

Report on Constitution and By-Laws

Chairman Dillinger called the attention of Council members to Chapter eight, Section two of the By-Laws titled "Treasurer's Duties." The question was raised as to the validity of only the Treasurer signing checks when the Constitution and By-Laws seemingly calls for two signatures on Association checks. Dr. Dillinger then read a legal interpretation by Mr. Dunaway as follows: "That to give validity to the provision of the last sentence in Section two of Chapter eight of the MAG By-Laws 'All checks for Association expenditures shall be signed by both the Treasurer and the Secretary or by any two officers of the Association designated by Council' must mean that where the Secretary and the Treasurer are one and the same person, some other officer must sign checks as there seems to be a very definite requirement that at least two officers of

the Association sign." On motion (Simonton-Thomas) it was voted to follow the Constitution and By-Laws as interpreted by Mr. Dunaway, Association Counsel. It was further moved (Alexander-Andrews) and voted that J. G. McDaniel be appointed to co-sign checks with the Secretary-Treasurer. It was also moved (Alexander-Hock) to request the Constitution and By-Laws Committee to study the possibility of an ammendment to change the Constitution and By-Laws so that if the Secretary-Treasurer is one person, only one signature would be necessary.

Unfinished Business

Chairman Dillinger called for unfinished business and David R. Thomas, Chairman of the Insurance and Economics Committee, submitted the following resolution:

"WHEREAS, the Bankers Fidelity Life Insurance Company is selling an indemnity type accident insurance to school children; and

"WHEREAS, this Company, either by direct representation or inference, leads the public to believe that all just medical expenses of such accidents are paid in full up to \$2,400, and

"WHEREAS, this Company has refused in certain instances to pay just claims for normal and reasonable fees which were covered by this insurance.

"NOW THEREFORE BE IT RESOLVED that the Council of the Medical Association of Georgia instruct the Secretary to inform the Bankers Fidelity Life Insurance Company that the Council has received complaints against this Company and suggest that this Company revise its procedures and publications so that the public is not mislead." On motion (Thomas-McDaniel) it was voted to adopt this resolution and to send a copy of the Secretary's letter to the Bankers Fidelity Life Insurance Company to the Georgia State Insurance Commissioner, Mr. Cravy.

New Business

Chairman Dillinger called for new business and the following reports were heard:

JMAG—Edgar Woody, *Journal of the Medical Association of Georgia* Editor, reported on the resignation of Miss Helen Hendry and recommended that Miss Elaine Ryals be employed as the Managing Editor of the *JMAG*. On motion (McDaniel-Alexander) it was voted that Miss Ryals be so employed.

AMA Public Relations Meeting, August 27-28, 1958, Chicago—Chris J. McLoughlin informed Council members that he had been invited to participate in the American Medical Association Public Relations Institute to be held August 27-28, 1958, Chicago. On motion (Tift-Wood) it was voted that Chris McLoughlin be sent to the AMA P.R. Conference August 27-28, 1956, Chicago at Association expense provided the AMA did not pay speakers expenses.

Interagency Committee on Tuberculosis—On motion (McDaniel-Tift) it was voted to appoint Dr. Walter

Dunbar for a two year term of office on the Interagency Committee on Tuberculosis representing the MAG.

Congress of Parents and Teachers Request—At the request of the Georgia Congress of Parents and Teachers it was moved (Thomas-Alexander) that Dr. Thomas McPherson, Chairman of the Association School Child Health Committee, be appointed to serve as a member of an Advisory Committee to the Georgia Congress of Parents and Teachers representing the MAG.

Southeastern Presidents, Secretaries, and Executive Secretaries Organization—Eustace Allen presented data about a proposed Southeastern State Association Presidents, Secretaries, and Executive Secretaries organization. On motion (Howard-McLoughlin) it was voted that the Headquarters Office with Dr. Allen write other Southeastern states about this proposed organization and investigate whether or not they would wish to participate in such an organization and report back to Council on the results of this investigation.

Date and Site of September Council Meeting—By general agreement it was voted to meet September 13 and 14 at the Oglethorpe Hotel, Savannah and gratefully accept the invitation of President Lee Howard as host for this meeting.

Date and Site of August Executive Committee Meeting—By general agreement it was voted to convene the Executive Committee of Council August 10th at 10 A.M. at the Academy of Medicine, Atlanta.

Appreciation—A rising vote of thanks by all members of Council was given to Dr. Fred Simonton for his outstanding hospitality on the occasion of this Council meeting.

There being no further business Chairman Dillinger called the meeting adjourned on motion duly made and seconded.

HOSPITAL RELATIONS

COMMITTEE MEETING MINUTES

THE HOSPITAL RELATIONS COMMITTEE of the Medical Association of Georgia met in Macon, Georgia, at 10:30 A.M., on Sunday, April 13, 1958, in the Pine Room of the Dempsey Hotel. Dr. Milford B. Hatcher of Rome, Chairman, called the meeting to order.

Committee members present included: Dr. Hatcher, Chairman; David Henry Poer, Atlanta, Co-Chairman; Kirk Shepard, Thomasville; Robert B. Martin, Cuthbert; Walter E. Brown, Savannah; James R. Paulk, Moultrie; Fred H. Simonton, Chickamauga; Frank G. Eldridge, Valdosta; W. L. Pomeroy, Waycross; Paul W. Warga, Athens; Ben K. Looper, Canton; and Henry H. Tift, Macon. R. C. Williams of the Division of Hospital Services, Department of Public Health, was also present.

Dr. Poer opened the meeting with a short prayer, and the minutes of the last meeting which had been held on August 11, 1957, in Macon, were read by Miss Doris Williams, acting secretary for Mr. Milton Krueger. The minutes were approved as read.

Dr. Hatcher called on Dr. Poer to present the agenda for the day, and Dr. Poer suggested that the committee go over their general business first and then get reports

from each of the subcommittees of the Hospital Relations Committee. Dr. Poer stated that many things had been taken up, there had been much discussion and "carrying on" by the Hospital Relations Committee for several years, and that it was now time that we "jell" some of our plans and make recommendations to the House of Delegates. Dr. Poer brought up the subject of how large the Hospital Relations Committee should be. The consensus of opinion at the present time is that we have as large a general committee as needed and that we should split into several smaller subcommittees. It was stated that the Hospital Relations Committee has completely absorbed the members of the Hospital Advisory Committee which works with R. C. Williams and the State Board of Health. This is to keep from having committees reduplicating the same work.

The need for specific action and recommendations was cited by Dr. Hatcher with the following examples:

1. A request from Eastman for help and advice in a situation there. This was discussed.
2. A letter and request for advice from Valdosta was read by Dr. Hatcher and discussed by Dr. Eldridge.
3. A situation in Tifton which has been straightened out.

The following reports and discussions of the subcommittee were made:

PARAMEDICAL RECRUITMENT: Walter Brown of Savannah made a report for the subcommittee on Paramedical Recruitment. An extensive general discussion was held about the Allied Medical Services and the tremendous shortage in all of these branches, such as X-ray technicians, lab technicians, laboratory aides, physicians aides, secretaries, nurses aides, etc. Dr. Brown told of the work being done in Savannah in conjunction with the Armstrong Junior College to train this much-needed personnel. He stated that quite a study has been and is being made in his area. The State Vocational program was discussed and the part they are playing and are willing to play in training Allied Medical trainees. It was stressed that the need and the situation in the small towns is particularly acute. R. C. Williams stated that this problem has many facets and that the two laboratory groups (technicians), the A.S.C.P., and the A.M.T. had quite a lot to say about the laboratory aide. The general consensus of opinion is that aides should be trained and used in the hospitals but only under the direct supervision of a physician. The real need is for aides to do routine work.

Another facet is nurses aides and licensed Practical Nurses, the latter of which have several schools for training throughout the state. The blanketing action which was taken about four years ago which took in all practical nurses was discussed. The L.P.N. work in the state was commended and the different methods for training in the different schools was discussed.

The question was discussed as to whether we should allot more funds for more training programs of this type. Dr. Hatcher stated that we need to decide how we could advise or help set up this type thing. It was suggested that the subcommittee should contact the L.P.N. Examining Board and the L.P.N. Schools and find out what is going on. R. C. Williams agreed to work with this committee to advise and guide them

in working and talking with these groups. Dr. Williams asked for opinions about the application of Hill-Burton Funds to build classrooms for L.P.N. training. Should we increase this fund? The opinion was that we are not in favor of setting up a Master Staff for training but should distribute them throughout the state to train for routine work. To get something going, it was suggested that Dr. Brown, his committee, and Dr. Williams get together and set up standards for these schools. Dr. Pomeroy stated that at first the Vocational Schools were very good, but then they began requiring that they stay in school from nine to twelve months instead of going into the hospitals. Most practical nurses who were licensed before the grandmother clause went into effect went to Atlanta last month and took the examinations for licensure. Dr. Pomeroy stated again that doctors have to control this. He stated that we definitely should not get into the feud between the registered nurses and the practical nurses. Dr. Brown's committee was requested to have recommendations of a definite nature at the next meeting.

HOSPITAL-MEDICAL MEDIATION COUNCIL:

Dr. Hatcher discussed the Hospital-Medical Mediation Council. The meeting in Atlanta was discussed, and unfortunately too many could not get to the meeting because of snow and sleet. The proposed plan for setting up the Hospital-Medical Mediation Council was read by Dr. Hatcher. (See addenda) Dr. Poer read a letter from Mr. Krueger on the action of council concerning the proposed plan. In Council there was opposition to the number of medical specialists on the proposed council, and it was voted to disapprove the proposal. Council recommended that the proposed mediation council choose a tenth member from the field of Radiology, Pathology, or Anesthesiology, and with this change they would approve the proposal.

Dr. Poer recommended that we leave the proposal as Dr. Hatcher read it but make one of the MAG members a Radiologist, pathologist, or anesthesiologist. Dr. Poer suggested that Dr. Tift, Dr. Eldridge, and Dr. Hatcher discuss this further at lunch and give their recommendations afterward. The meeting adjourned for lunch in the Dempsey Coffee Shop.

Following lunch, Drs. Tift, Eldridge, and Hatcher made the following recommendations concerning the membership of the Hospital-Medical Mediation Council: The MAG should have four members, the Georgia Association of Governing Boards should have two members, and the Georgia Hospital Association should have two members. The Department of Public Health (State Board of Health) will designate one member as an ex-officio member, non-voting, to attend all meetings in an advisory capacity. They suggested that the rest of the proposal should remain as it is written.

Dr. Eldridge moved that the change in the proposed plan of membership of the Hospital-Medical Mediation Council as suggested by Drs. Tift, Eldridge, and Hatcher be accepted by this committee and the proposal presented to Council with this change. This motion was seconded by Dr. Poer and it was passed unanimously.

It was also suggested that the word "small" be deleted from the professional standards for hospitals, and that they should apply to all hospitals. A discussion as to changing the proposal as regards responsibility for sec-

retarial work was held, but no decision was made.

STATE BOARD OF HEALTH HOSPITAL ADVISORY COUNCIL: Dr. Henry Poer reported on the State Board of Health Hospital Advisory Council. He suggested that we set up an active committee to work with Dr. Williams, which will actually discuss with him either in writing or in meetings various projects brought up to his department so that the MAG will be in a position to express its opinion. It was suggested that this committee not just meet once a year and merely approve what has gone on. Dr. Williams stated he would like to have help before these things are done rather than criticism afterward. Dr. Williams said the Public Health Department wants to work in close harmony with the medical profession in its construction program. We are at all times to call on them. He stated that by law all funds must be allotted to the authoritative body—that is the Hospital Governing Boards. Dr. Williams presented a report of the Public Health Hospital construction program. (See addenda.) The placing of new hospitals in a community was discussed. The qualifications of physicians in the community where a hospital is to be placed was discussed.

Dr. Poer suggested that we ask the State Board of Health to obtain a recommendation from the Hospital Advisory Committee before giving final approval to a request for facilities. If need be, this committee should meet with Dr. Williams and discuss such facilities. Dr. Williams gave a resume of the procedure gone through after a community has made a request, and he suggested that he not seek the advice of the MAG Committee until after the sociological and economic studies are made and the report given to the community. Then before any final action is taken, advice should be received from the Hospital Advisory Committee. If the request is not recommended by the State Health Department, the Advisory Committee does not need to be consulted.

Dr. Poer moved and Dr. Brown seconded the motion that the Department of Public Health not give any final approval to a request for facilities until they obtain a recommendation from the MAG Committee. This motion passed unanimously. Dr. Williams offered to send copies of the Survey Recommendations to the members of the Committee.

Dr. Simonton discussed the Hospital Indigent Care program and legislation which has been passed. The committee to study this program was appointed by the Governor. The Board decided last Thursday that this is one program that the doctors have to make work. This program is coming up at the House of Delegates and will be referred to reference committees for approval of the MAG.

PHYSICIAN-HOSPITAL RELATIONS: Nothing to add to the previous discussions.

PROFESSIONAL STANDARDS FOR HOSPITALS—Recommended standards were read by Dr. Hatcher. (See addenda). Dr. Simonton moved and Dr. Pomeroy seconded the motion that the standards as read be approved. This motion was passed unanimously.

Dr. Simonton moved and Dr. Looper seconded the motion that the proposed rules and regulations governing the hospital care for the Indigent for the State of Georgia be presented to the House of Delegates for approval. This motion was passed unanimously.

There being no further business, the meeting was adjourned.

ADDENDA TO HOSPITAL RELATIONS COMMITTEE MEETING MINUTES

Professional Standards for Hospitals

REQUIREMENTS:

1. Constitution and By-Laws
2. Adequate medical records
3. Blood count and urinalysis on all patients
4. Provisions for laboratory and X-ray services
5. Nursing personnel (at least one registered or licensed practical nurse.)
6. Tissue examination for all specimens removed
7. Limits on surgical practice and operating facilities
8. Anesthetics—personnel properly trained
9. Affiliation with nearby hospitals for services not obtainable in their hospital
10. Care of medical patients (oxygen, suction, etc.)
11. Minimum requirements for maternity services and other requirements of the hospital
12. Drugs which should be kept, and all arrangements for obtaining supplies

Requirements which are not specific will be drawn up later by the Hospital Committee and approved by Council of the MAG. These may vary with the size of the hospital, its location, etc.

PROPOSED GEORGIA HOSPITAL MEDICAL MEDIATION COUNCIL

Note: This is a form of liaison at state level, for specific purposes, as recommended by a drafting committee composed of representatives of the organizations listed below. It is for formal adoption as outlined, or with modifications, by the respective parent groups.

Purposes

1. To provide a representative council available for local situations, upon request, for advice and consultation regarding local organizational problems;
2. To develop educational programs for improve-

ment of medical-administrative-trustee relations at hospital level;

3. To develop proposed professional and administrative objectives for small hospitals;

4. To stimulate and assist small hospitals to attain acceptable standards; and

5. To study means of giving suitable recognition to small hospitals for attainment of improved standards.

Membership

Organization	Representatives on Council
Georgia Hospital Association	2
Medical Association of Georgia	2
Georgia Association of Hospital Governing Boards	2
Georgia Chapter, American College of Surgeons	1
Georgia Academy of General Practice	1
Georgia Department of Public Health	1

Meetings

Quarterly, on the first Sunday of March, June, September, and December (beginning with the first Sunday in June, 1958) at 2:30 P.M. in the offices of the Medical Association of Georgia, 875 W. Peachtree St., N.E., Atlanta, Georgia; and additional call meetings at the discretion (including time and place) of the Chairman.

Chairmanship

At its first regular quarterly meeting of each calendar year the Council will elect a Chairman from its membership. A Chairman may not succeed himself in office. Office and secretarial functions will be rotated annually between the Georgia Hospital Association and the Medical Association of Georgia beginning in 1958 with the Georgia Hospital Association.

Finances

Office expense (communications, stationery, supplies, postage, etc.) will be borne jointly by the Medical Association of Georgia and the Georgia Hospital Association, with initial appropriations of \$100 each for the year 1958.

**MATERNAL AND INFANTS
WELFARE MEETING MINUTES**

THE MATERNAL AND INFANT WELFARE COMMITTEE meeting was called to order at 10:00 A.M., Sunday, April 27 by Dr. Charles Mulherin, Chairman, in the Pine Room of the Dempsey Hotel, Macon, Georgia. Although only Dr. Mulherin, Chairman, and Dr. Helen Bellhouse, Secretary, were able to be present, four invited guests representing information on midwives and nurse-midwife problems and programs were present, and the group was honored by the presence and sympathetic support of the MAG President, Dr. Bruce Schaefer, for over half the session. Dr. Bickerstaff had been reported in Europe and Dr. Hydrick was acting on committee for exhibits. He had given his secretary some information on his ideas and those of Dr. Eugene Griffin, also a member, before the meeting convened. Prior commitments prevented the others from attending according to the postal card reports.

Despite the lack of committee representation, and in view of the "outside representation", it was decided to proceed with the meeting, presenting the minutes and background information to the committee members later as a basis for a subsequent meeting.

After discussion, the secretary was instructed to write a letter to each committee member regarding final acceptance of "suggestions to physicians signing certificates of safety for delivery by a midwife." This was the second revision of the proposed document. Four of the committee had expressed themselves as favorable provided they be reviewed annually. Unless the secretary receives great objection in writing, these suggestions will be submitted to Council for approval.

Following the agenda as set up, the next consideration was development of recommendations toward solving maternity and newborn care needs in Georgia.

Prenatal care—It was felt by those present that the full committee should give serious consideration to presenting to Council a resolution that in all counties where there is a public health department and personnel, and having 50 or more midwife deliveries, but no planned provision for medical prenatal supervision, the local medical group be urged by MAG to participate with the local health department in such a plan. There are 14 such counties in the state—most of them in the middle section of the state. Maps were submitted to substantiate this.

Attendance at delivery and place of delivery—It was decided that:

(1) where there are sufficient hospital beds and bassinets—"25 bassinets per thousand livebirths seems to be a good magic number"—and where the doctors are sufficient in number, around one to 1,500 to 2,500 population, but persistence of high number of lay midwife deliveries exist, that medical groups and local health departments put forth a concerted effort toward provisions for implementation of hospitalization for delivery by a physician.

(2) where there are sufficient hospital beds but insufficient effective number of physicians for the population concerned, that the local medical group and the local and state health departments implement nurse-midwife hospital-health department programs. There are only two or three such counties in need. Group enthusiasm was such that district solutions were recommended—that is, provision of nurse-midwife hospital service for several counties, not just within one county.

(3) for the locations where there is a lack of hospital beds and bassinets, and of effective physician-population ratio, and because the lay-midwife population is aged and rapidly disappearing, the needed new lay midwife prospects have training made available by the State Health Department. Based on past experience of the State Health Department in training lay midwives under the 1955 Midwife Act, it was felt that the committee should give serious consideration to recommending to the State Health Department that a central training area where the home situation type of teaching could be given be set up. Nominees for training would of necessity have to have local medical approval as to need and local, and state health department approval as to qualifications and potentialities. Stipend for training would be necessary.

It was proposed that in those counties where there is a problem of hospitalization for delivery of both normal and abnormal obstetrics, (only nine of the 150

counties have any real plans for such), that private practitioners in the form of the local group and/or public health take leadership in planning with the hospital authority to meet the needs.

The meeting was adjourned with the recommendation that the entire Maternal and Infant Welfare Committee, including both maternal death and perinatal mortality committees, be acquainted with the findings of the April meeting and be called for a meeting in June or July to review the above recommendations to MAG and to the State Health Department and for presentation to Council for further action.

HIGHLIGHTS OF THE AMA SAN FRANCISCO MEETING

THE GEORGIA DELEGATION attending the 107th Annual Meeting of the American Medical Association, June 23-27, 1958, San Francisco, introduced two resolutions at the AMA House of Delegates sessions. The first resolution called for a permanent AMA Board of Trustees Mediation committee to study and resolve disputes between medical societies and medical schools similar to the AMA Committee which successfully arbitrated the MAG-Richmond County Medical Society-Medical College of Georgia problem. The resolution was tabled because it was pointed out that such an AMA committee could be established at the request of the Board at any time.

Georgia also introduced a resolution urging the AMA House of Delegates to actively support an "indemnity-type plan" for the administration of P.L. 569, known as Medicare. This resolution was also tabled but the House went on record as being in favor of an "Indemnity-type" medicare plan for those states wishing such a plan, with this matter left to the individual state associations.

The Georgia physicians presented Dr. George F. Lull with a MAG Certificate of Appreciation for his service to the profession as AMA Secretary-General Manager.

Louis Orr, AMA President-Elect

Dr. Louis M. Orr, urologist of Orlando, Fla., was chosen unanimously as president-elect for the coming year. Dr. Orr, who in recent years has been vice speaker of the House of Delegates and chairman of the A.M.A. Committee on Federal Medical Services, will become president of the American Medical Association at the June, 1959, meeting in Atlantic City. He then will succeed Dr. Gunnar Gundersen of La Crosse, Wis., who became the 112th president at the Tuesday night inaugural ceremony in the Rose and Concert Rooms of the Sheraton-Palace Hotel.

House of Delegates Actions

Major discussion of relations between medicine and

the UMWA Welfare and Retirement Fund centered on a reference committee report which concurred in a Board of Trustees opinion that final action on two resolutions adopted in December, 1957, should be postponed until the final report of the Commission on Medical Care Plans is received.

One of those resolutions, Number 20, declared that "a broad educational program be instituted at once by the American Medical Association to inform the general public, including the beneficiaries of the Fund, concerning the benefits to be derived from preservation of the American right to freedom of choice of physicians and hospitals as well as observance of the 'Guides to Relationships Between State and County Medical Societies and the UMWA Welfare and Retirement Fund' adopted by this House last June." The other resolution, Number 24, called for the appropriate A.M.A. committee or council to engage in conferences with third parties to develop general principles and policies which may be applied to their relationships with members of the medical profession.

In explaining its position that final action on the two resolutions should be taken only after proper study, the reference committee said it "anticipates that the final report of the Commission on Medical Care Plans will contain recommendations serving to clarify the relationships between the medical profession, the patient, and third parties, and the committee has been assured that this can be expected." The committee also urged the Commission to present its recommendations no later than December, 1958.

The House of Delegates, however, by a vote of 110 to 72, adopted a floor amendment "that this section of the Reference Committee report be amended to show that our A.M.A. Headquarters Staff is directed, under supervision of the Board of Trustees, to proceed *immediately* with the campaign which was originally ordered at Philadelphia last December, that no further delays will be tolerated, and that the Council on Medical Service be relieved of any further responsibility in this matter."

Social Security Coverage

In considering seven resolutions dealing with the inclusion of self-employed physicians under the Social Security Act, the House disapproved of three which called for polls or a referendum of the A.M.A. membership, one which favored state-by-state participation in Social Security, and two which called for compulsory inclusion on a national basis. Instead, the House adopted a resolution pointing out that "American physicians always have stood on the principle of security through personal initiative," and reaffirming unequivocal opposition to the compulsory inclusion of self-employed physicians in the Social Security system.

On the question of polls, the House expressed the opinion that any poll should be taken on a state-by-state basis and the results transmitted to the A.M.A. delegates from that state. It also pointed out that since there is no provision in the Constitution and Bylaws for a referendum of members, such a referendum would usurp the duties and prerogatives of the House of Delegates, which is the Association's policy-making body.

Voluntary Health Organizations

Dealing with problems that have arisen in the raising and distributing of funds since development of the concept of united community effort, the House adopted the

following statement offered in the form of amendments from the floor:

"1. That the House of Delegates reiterate its commendation and approval of the principal voluntary health agencies.

"2. That it is the firm belief of the American Medical Association that these agencies should be free to conduct their own programs of research, public and professional education, and fund raising in their particular spheres of interest.

"3. That the House of Delegates respectfully requests that the American Medical Research Foundation take no action which would endanger the constructive activities of the national voluntary health agencies.

"4. That the Board of Trustees continue actively its studies of these perplexing problems looking forward to their ultimate solution."

Veterans' Medical Care

Pointing out that the Federal government spent \$619,614,000 on hospitalized medical care of veterans in VA hospitals in 1957, of which about 75 per cent had non-service-connected disabilities, and that ways and means of obtaining economy in Federal government are allegedly being sought by Congress at this time, the House urged Congressional action to restrict hospitalization of veterans at VA hospitals to those with service-connected disabilities. It also recommended that the American Medical Association suggest to the Dean's Committees that they restrict their activities to Veterans Administration hospitals admitting only patients with service-connected disabilities.

The Medicare Program

In disapproving a resolution calling for repeal, modification, or amendment of Public Law 569, the House took the position that desired changes in the Medicare program could be accomplished through modification of the present implementing directives without the necessity for new legislation. The House reaffirmed the action taken last year in New York recommending that the decision on type of contract and whether or not a fee schedule is included in future contract negotiations should be left to individual state determination. Also reaffirmed was the Association's basic contention that the Dependent Medical Care Act as enacted by Congress does not require fixed fee schedules; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fees, and fixed fee schedules would ultimately disrupt the economics of medical practice.

Washington Office

The House adopted a resolution requesting the Board of Trustees to make an immediate survey and re-evaluation of "the functions and effectiveness of the over-all A.M.A. legislative system, including the Washington office, in the light of present-day needs of the government, public, and medical profession alike for effective liaison between government and medicine on all matters affecting the public's health and adequate, prompt, and accurate transmittal to the full membership of the A.M.A. of information on all current public issues in which the physician has a direct interest." The House asked that the Board of Trustees implement, as rapidly as possible, all changes and additions that its survey discloses are desirable to achieve the basic purpose of

the resolution, "effective public and government relations."

Medical Aspects of Hypnosis

A Council on Mental Health report on "Medical Use of Hypnosis" was approved by the House, which recommended that it be published in the *Journal of the American Medical Association* with bibliography attached. The report stated that general practitioners, medical specialists, and dentists might find hypnosis valuable as a therapeutic adjunct within the specific field of their professional competence. It stressed, however, that all those who use hypnosis need to be aware of the complex nature of the phenomena involved. Teaching related to hypnosis should be under responsible medical or dental direction, the report emphasized, and should include the indications and limitations for its use. The report urged physicians and dentists to participate in high level research on hypnosis, and it vigorously condemned the use of hypnosis for entertainment purposes.

Over-the-Counter Medications

The House endorsed recommendations by the Public Relations Department that:

The A.M.A. join with other interested groups in setting up an expanded voluntary program, coordinated by the National Better Business Bureau, which will seek to eliminate objectionable advertising of over-the-counter medicines.

The A.M.A. counsel with the National Better Business Bureau in the selection of a physicians' advisory committee.

The established facilities of the A.M.A., such as the Chemical Laboratory, the offices of the various scientific councils, and the Bureau of Investigation, be made available, so far as is feasible, to aid in the carrying out of this program.

The Public Relations Department continue its liaison work with the various groups involved and assist in the development and operation of this program in any way possible.

The A.M.A. become a sustaining member of the National Better Business Bureau, giving evidence of its willingness and desire to support this organization in its worthwhile activities.

Other Miscellaneous Actions

Among a wide variety of actions on many subjects, the House also:

Adopted amendments to the Constitution and By-laws which eliminate the separate offices of Secretary and Treasurer, combining them into one, and which change the titles of the General Manager and Assistant General Manager to Executive Vice President and Assistant Executive Vice President;

Recommended the appointment of a Committee on Atomic Medicine and Ionizing Radiation and suggested that it concern itself with informing the American public on all phases of radiation hazards related to the national health;

Approved in principle the admission of the Virgin Islands Medical Society as a constituent society of the American Medical Association;

Commended the Federal Food and Drug Administration for its untiring efforts in behalf of the public and the profession, and urged all states to review and strengthen their food and drug laws;

Approved the "Suggested Guides for the Organiza-

the association

tion and Operation of Medical Society Committees on Aging," submitted by the Council on Medical Service;

Commended the Committee on Medical and Related Facilities of the Council on Medical Service for its report on the Hill-Burton Study and approved its recommendations;

Requested that any funds provided under the Public Assistance provisions of the Social Security Act for medical care of the indigent be administered by a voluntary agency such as Blue Shield on a cost plus basis or by a specific agency established by the medical society of the state in which indigent care is rendered;

Directed the Board of Trustees to study problems pertaining to licensure by reciprocity and to consult with the Federation of State Medical Boards in an attempt to find a satisfactory solution;

Urged all members of the House of Delegates to give full consideration to the preliminary report of the Committee on Preparation for General Practice and to submit comments and suggestions to that committee;

Expressed the opinion that some operating room experience is valuable and necessary training for all nurses;

Recommended that general hospitals, wherever feasible, be encouraged to permit the hospitalization of suitable psychiatric patients, and

Approved a National Interprofessional Code for physicians and attorneys prepared by the joint liaison committee of the American Medical Association and the American Bar Association.

ANNOUNCEMENTS

International College of Surgeons—Western regional meeting, Reno, Nevada, August 21-23. For information write to Frederick M. Anderson, M.D., Six South State Street, Reno, regent of Nevada.

The Tennessee Valley Medical Assembly, Read House, Chattanooga, Tennessee, September 29-30, 1958.

Two courses in Obstetrics, October 16-30, 1958, offered by the Woman's Hospital in New York City. "Ante-partum Care" and "The Conduct of Labor and Delivery." Each course AAGP approved 30 hours Category I. Limited to general practitioners. Full time courses running for a week each. Students will be expected to work in the clinics, and in the second course will be assigned to patients in labor whom they will assist at delivery. Either one or both courses may be elected. Carl P. Wright, Jr., Woman's Hospital, 141 West 109th Street, New York 25, New York.

Second Oklahoma Colloquy on Advances in Medicine - Arthritis and Related Disorders, November 12-15, 1958. Meeting to be held in the auditorium of the Uni-

versity of Oklahoma School of Medicine, Oklahoma City, Oklahoma.

The New York University-Bellevue Medical Center Post-Graduate Medical School—Regional Anesthesiology, September 8-13, 1958. Intensive one week course consisting of lectures, dissection, clinical demonstration, and practice. Includes therapeutic nerve blocking. Under direction of Professor Emery A. Rovenstine. Maximum class 16. Tuition \$125. New York University Post-Graduate Medical School, 550 First Avenue, New York 16, New York.

Comprehensive Review in Dermatologic Histopathology, September 8-12, 1958. A complete review of both the normal histology of the skin and the essential histopathology of disease of the skin. Under direction of Professor Marion B. Sulzberger. Maximum class 20. Tuition \$100. New York University Post-Graduate Medical School, 550 First Avenue, New York 16, New York.

Recent Advances In Surgery, September 8-20, 1958. Covers recent advances in general surgery and stresses physiological and biochemical considerations. Emphasis on recent advances in surgery of the thyroid, thorax, and cardiovascular system, including portal hypertension and cirrhosis of the liver. Under direction of Professor J. William Hinton. Tuition \$200. New York University Post-Graduate Medical School, 550 First Avenue, New York 16, New York.

Southeastern Surgical Congress 1959 Prize Scientific Paper Award. The best unpublished contribution on surgery or allied subjects will be awarded \$100.00 and expenses for author to attend next Annual meeting in Miami Beach, Florida; second prize, \$50.00; third prize, \$25.00. Open to residents in AMA approved residences in states of Alabama, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Three copies of paper sent before December 1, 1958 to Councilor of the state in which the resident is living. Councilor's name obtained by writing Southern Surgical Congress, 1032 Hurt Building, Atlanta.

Ninth Annual Winston-Salem Heart Symposium, October 3, 1958. Ballroom, Hotel Robert E. Lee, Winston-Salem, North Carolina. AAG approved six and one half hours credit.

Post-graduate Obstetric and Pediatric Seminar, Daytona Beach, Florida, September 8-10, 1958. AAGP approved 15 hours Category I. Sponsored by Florida Chapter AAGP, Maternal and Infant Welfare Committees of Medical Associations of Georgia-Alabama-South Carolina-Florida; Maternal and Child Health Divisions of Health Departments of these states; and Southeast Region American Academy of General Practice.

DEATHS

WILLIAM ANDREW COLE, 74, Savannah, died June 13 after a short illness.

A native of South Carolina, Dr. Cole received his

medical education at the University of Georgia Medical Department. He served his internship at Park View Sanitarium, and Savannah General Hospital. For twelve years he served as Chief of Staff at Candler Hospital in Savannah, and at the time of his death was head of the X-Ray Department there.

He was a member of the Georgia Medical Society, First District Medical Society, Medical Association of Georgia, and the American Medical Association.

Dr. Cole has lived in Savannah since he began the practice of medicine and was a member of the Methodist Church.

Survivors include a niece, Mrs. Ruth Bunn Thomas, Paris, France; and a nephew, George Grady, High Springs, Florida.

SOCIETIES

The annual BIBB COUNTY MEDICAL SOCIETY picnic was held in July at Samuel E. Patton's lake. Thomas H. Williams was in charge of the arrangements.

At the regular meeting of the CARROLL-DOUGLAS-HARRALSON SOCIETY the society played host to the dentists and druggists of Carroll-Douglas-Harralson and held a doctor-dentist-druggist barbecue at the REA Building, Carrollton. About fifty to sixty doctors, dentists, and druggists were in attendance. Thomas F. Sellers, director of the State Department of Health, and C. C. Aven, Marietta, director of the Southern School of Pharmacy, were guest speakers.

At the April Carroll-Douglas-Harralson meeting a committee was appointed to investigate and report to the society on the society's sponsorship of a polio shot campaign. The campaign was completed June 17 and approximately 3,770 polio shots were administered by society members. This is one of the most effective polio campaigns held in the state today.

THE FULTON COUNTY MEDICAL SOCIETY joined with the National Foundation of Infantile Paralysis to sponsor a campaign to administer Salk Polio shots to people of Atlanta and Fulton County. This "Dollar Clinic" began July 15 and will be operated every other week for eight weeks.

The bulletin of the Fulton County Medical Society has won a top award from the American Medical Writers' Association. It consists of a certificate and plaque, to be given Thomas J. Anderson, Jr., editor of the bulletin, at the association's annual meeting in September in Quincy, Illinois.

PERSONALS

First District

BENJAMIN C. WILLS, Savannah neuropsychiatrist, presented a paper before the annual meeting of the American Electroencephalographic Society in Atlantic City recently. The title of Dr. Wills' paper was "EEG

Activation by Means of Induced Reduction of Cerebral Blood Supply."

Second District

E. C. BRIDGES, Donaldsonville, has been presented a certificate of appreciation by the Selective Service system for "15 years of service as an uncompensated member." Dr. Bridges served as medical adviser of the board.

Third District

ROBERT A. COLLINS, JR., Americus, has been awarded a Certificate of Certification by The American Board of Surgery.

DR. and MRS. W. G. ELLIOTT, Cuthbert, have returned from San Francisco, California, where Dr. Elliott attended the meeting of the American Chest Physicians. Dr. Elliott holds a Fellowship in this organization and was presented a certificate of recognition for his work in the field.

Fourth District

W. STEVE WORTHY, Carrolton, has moved into his new office building on Tanner Memorial Drive.

Fifth District

The President-Elect of the Georgia Heart Association, J. GORDON BARROW, Atlanta, addressed the Sixth Annual Meeting of the Northeast Georgia Chapter, which was held in Athens.

J. WILLIS HURST and JOSEPH H. PATTERSON, Atlanta, addressed the fifth annual Mountain Top Medical Assembly which was held at Waynesville, North Carolina.

Sixth District

W. EARL LEWIS, of Macon, has been appointed to succeed Dr. Ralph Newton as physician for Mercer University.

Seventh District

HAROLD B. CARSON, of Chatsworth, has recently accepted the position as Assistant Resident in Surgery at Grady Memorial Hospital in Atlanta.

STEPHEN D. SMITH, of Rome, has been named president of the medical staff at Floyd Hospital. Other new members of the staff include WARREN GILBERT, president-elect; HARLAN STARR, vice president; and ROY CRAWFORD BROCK, secretary. WALTER KETCHUM was approved for appointment to the staff.

Eighth District

ROBERT E. PERRY, Durham, North Carolina, has moved to Brunswick, where he has become associated with the Glynn-Brunswick Memorial Hospital for the practice of Clinical and Anatomical Pathology. Dr. Perry was formally in general practice in Valdosta.

Ninth District

PETER LAMPROS, formerly of Atlanta, has opened an office for the practice of medicine in the Gillespie Doctors' Building on Savannah Street, Clayton.

Tenth District

Retiring president of the Medical College of Georgia, EDGAR R. PUND, Augusta, was honored at a reception at the Garden Center in Augusta recently. Dr. Pund has served as president of the college since 1953.

W. F. HAMILTON, SR. and EDWIN C. JUNGCK,

PERSONALS / Continued

Augusta, participated in the program of the American Medical Association convention in San Francisco, California. Dr. Hamilton was moderator for the specialist exhibit on pulmonary functions and therapy, and Dr. Jungck appeared in the symposium on newer diuretics, presenting the paper, "Pre-Menstrual Tension."

RICHARD TORPIN, Augusta, presented the exhibit and a paper, "Implantation of the Human Ovum and its Relationship to Placental Anomalies" during the International Federation of Gynecologists and Obstetricians in Montreal, Canada.

CLAUDE STARR WRIGHT, Augusta, has been named Professor of Medicine at the Medical College of Georgia.

CURTIS H. CARTER, Augusta, was named a fellow

in the American College of Chest Physicians during the meeting of the College in San Francisco.

ROBERT B. GREENBLATT, Augusta, has been in Mexico City where he was honorary president of the Third Congress of Obstetricians and Gynecologists of Mexico and Latin America. Dr. Greenblatt also presented a formal paper during the joint meeting. He attended the meeting of the Endocrine Society in San Francisco, where he presented the paper, "Intersexuality."

A. CALHOUN WITHAM and RUFUS F. PAYNE, Augusta, have been promoted to Associate Professors of Medicine at the Medical College of Georgia.

JOHN R. FAIR, Augusta, has been promoted to Associate Professor of Surgery (Ophthalmology), and SHANNON GALLAHER and VICTOR A. MOORE, also of Augusta, have been advanced to Assistant Professors of Medicine at the Medical College of Georgia.

CALENDAR OF MEETINGS

Bartow County, Cartersville, V. H. Maley, Secretary September 3
Chatooga County, Summerville, H. A. Goodwin, Secretary September 5
Cherokee-Pickens, Dr. and Mrs. Charles Andrews, Canton, E. A. Roper, Secretary August 29
Cobb County, Kennestone Hospital, Marietta, Hugh Colquitt, Secretary September 2
Colquitt County, Moultrie, James T. Flynn, Secretary September 9
Coweta County, Ranch House, Newnan, Joe W. Parks, Jr., Secretary September 9
Decatur-Seminole, Donalsonville, M. A. Ehrlich, Secretary September 9
DeKalb County, 761 E. College Avenue, Decatur, H. G. Carter, Secretary September 15
Emanuel County, Emanuel County Hospital, Swainsboro, H. W. Smith, Secretary September 2
Flint County, Crisp County Hospital, Cordele, Joseph Christmas, Secretary September 2
Fulton County, Academy of Medicine Bldg., Atlanta, T. J. Anderson, Secretary September 4
Habersham County, Commercial Hotel, Louisville, John J. Pilcher, Secretary September 4
Hall County, Gainesville Elks Club, Hamil Murray, Secretary September 15
Jefferson County, Millen, A. P. Mulkey, Secretary September 1
Laurens County, Dublin Country Club, John A. Bell, Secretary August 28
Mitchell County, Mitchell County Hospital, Camilla, A. A. McNeill, Secretary August 26

Muscogee County, Ft. Benning, A. C. Hobbs, Jr., Secretary September 9
Newton-Rockdale, Newton Hospital, Covington, J. W. Purcell, Secretary September 16
Ocmulgee County, Eastman, Reid Gullutt, Secretary September 9
Peach Belt, Peach Belt Hospital, Fort Valley, W. G. Tolbert, Secretary September 16
Spalding County, Elks Club, Griffin, J. W. Watkins, Secretary September 2
Troup County, Highland Country Club, LaGrange, J. R. Turner, Secretary September 16
Thomas-Brooks, Archbold Hospital, Thomasville, Julian B. Neal, Secretary September 18
Upson County, Upson County Hospital, Thomaston, Doug L. Head, Jr., Secretary September 9
Walker-Catoosa-Dade, Dr. John J. Killiffer, Chattanooga, E. M. Townsend, Secretary August 26
Ware County, Waycross, A. M. Knight, Secretary September 4
Washington County, Rawlings Hospital, Sandersville, M. W. Hurt, Secretary September 15
Wayne County, Jesup, Albert L. Howard, Secretary September 8
Whitfield County, Library, Hamilton Memorial Hospital, Dalton, James F. Redfearn, Jr., Secretary September 17
Wilkes County, Wolf's Barbecue, Washington, J. N. Shearouse, Secretary September 16

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MEDICAL ETHICS

Hal M. Davison, M.D.

MANY DOCTORS, practically all patients, and the public at large believe that medical ethics were created by doctors for the benefit of doctors. This is not true. Medical ethics were created primarily for the benefit of patients. Ethics are not laws made to be followed—neither are they rules born of custom and convention. The term “ethics” denotes certain moral codes or principles by which people live. The term “medical ethics”, therefore, refers to a moral code regulating the conduct of physicians in relation to their patients, to the public at large, to medical institutions, and to their colleagues.

Ethics should exist and develop within us naturally and, if we obey them, our conduct toward our fellow men is sincere, honest, and unselfish. However, we physicians are only human beings and, in some of us, ethics may not be developed to their fullest extent and must be taught to us. Also, misunderstandings arise between doctors and patients, between doctors and institutions, and between doctors and doctors. In such situations a definite code of action is needed to which one can refer. Such a code does exist and all members of our medical societies subscribe to it.

A simplified form of this code was adopted in June, 1957 by the House of Delegates of the American Medical Association as follows:

“These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in relationship with

patients, with colleagues, with members of allied professions, and with the public.

Section 1

“The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

Section 2

“Physicians should strive continually to improve knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

Section 3

“A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

Section 4

“The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession, and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

Section 5

“A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

Section 6

“A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause

Presented to the senior medical class in a lecture course for senior medical students titled, “Art of the Practice of Medicine,” sponsored by the Medical Association of Georgia at Emory University School of Medicine and the Medical College of Georgia, 1958.

determination of the quality of medical care.

Section 7

"In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision, to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies, or appliances may be dispensed or supplied by the physician provided it is in the best interest of the patient.

Section 8

"A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

Section 9

"A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

Section 10

"The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community."

Although the above Code of the American Medical Association is all inclusive in principle, we must, nevertheless, create for ourselves a personal code, one that will automatically guide our conduct in the various situations arising in our practice. In this light let us discuss the practical application of each section of the American Medical Association Code.

Section 1

The first and major objective of the medical profession is to serve humanity. While doctors must derive a living for their families and themselves, the object of making money must always be subordinated to the prime objective of service. While all of us, in some way, do render service to humanity as a whole, most of us as practitioners deal with individuals. In such contacts we must always strive to preserve the innate personal dignity of every patient. Nothing in the physician's attitude or in his treatment should ever detract from the patient's self-respect or injure his personality. We must render service as needed without regard for race, color, nationality, politics, religion, social status, and the patient's financial condition.

Section 2

When we begin practice, we should bring with us and use the knowledge of present-day medicine. As we continue, we owe it to our profession, to our patients, and to society at large to keep up with current medical advancement by all available methods of post-graduate study suitable for our personal needs. The treating of any patient, no matter what his complaint or his disease, demands knowledge, understanding, and treatment of his total needs—physical, mental, and emotional. We are required not only to relieve pain and to heal diseases, but to show our patients a way to happiness.

Section 3

There is some misunderstanding among lay individuals concerning the attitude of organized medicine toward the various cults. The cultists claim that their methods of diagnosis and treatment are based on scientific facts and are adequate. We know that the opposite is true since they have not shared in any of the advances in medicine and do not use them. One can not practice medicine today without the use of insulin, the sulfa drugs, the mycins, penicillin, the cortisone series of drugs, or without using all of the other technical advances in the various specialties of medicine. Therefore, organized medicine does not recognize the cultists as being a part of the healing profession and, in consequence, we can't have one of them in our offices or on the staff of our hospitals; neither can we refer patients to one or consult with one. When a patient comes to us who has been or still is under the care of a cultist, our attitude toward the situation must be guided by circumstances. It is my personal belief that it is better for everyone concerned if we do not argue or try to proselyte them but, rather, treat them in the usual way.

The public is confused by the fact that various cults are recognized legally and because the average layman makes little or no distinction between all who call themselves doctors. It is, of course, part of our obligation to the public to protect it not only from incompetent doctors in our own profession, but from all others whom we feel to be incompetent. And yet, much of what we do to protect the public against these people is misunderstood and often we get accused of jealousy and selfishness. When this happens we must not allow ourselves to become irritated or angry, but quietly and with facts at our command, explain the truth of the matter.

Section 4

The public as a whole and, I am afraid, some doctors, are under the delusion that medical ethics require doctors to protect all members of their pro-

fession who make mistakes, who are incompetent, who are guilty of fraud, or who are guilty of immoral or illegal conduct in their practice. Nothing is less true. Medical ethics require that we be competent ourselves and that we keep out of our profession all who are not competent. Our code of ethics requires that we expose and expel from our societies and, if necessary, assist in legally prosecuting any doctor who can be proven guilty of illegal, corrupt, or dishonest practice.

The question arises, in what way must we handle the situation when we believe that we have observed a fellow physician practicing in an unethical manner? Personally, I would appreciate very much a brother physician coming to me and telling me frankly about the appearance or the report of such practice on my part. If such a procedure seems unwise, then we may either watch for further evidence to confirm our suspicions, discuss the matter privately with an older doctor, or talk it over with the proper officials of the local medical society. If no doubts remain about the situation and we feel that medical ethics require that we report it, we must have the fortitude to put the accusation in writing, along with confirmatory facts, dates, and witnesses, and be prepared to face the one accused.

Section 5

Patients have free choice of physicians, and physicians, within certain limits, may choose whom they will serve. This latter depends on the availability of medical service as a whole and the emergency involved. All doctors must cooperate with each other and with patients to serve the medical needs of the community in which they live. Once a doctor does accept a patient, he must care for that patient to the best of his ability, either for the duration of the immediate illness or until he gives notice that he desires to discontinue his services, allowing sufficient time for the patient to obtain another doctor. Under the proper circumstances and with the patient's consent, a doctor may make the arrangements for another physician to take charge of the patient. Under no circumstances is it ethical to neglect a patient who is under our care.

Ethical doctors do not solicit patients and do not advertise. However, it is a part of a physician's duty to assist in the education of the public concerning medical matters. Under the direction of a medical society, he is not only allowed, but is duty-bound to assist in educating the public by writing, by speaking, or by cooperation through such media as newspapers, magazines, movies, radio, and television.

A new doctor in a community has certain ethical means of making contact with other people —

through social acquaintances, through membership in Church and clubs, membership in medical societies, by speaking in medical societies, and sending out reprints. However, the best advertisement for any doctor is satisfied and well patients.

Section 6

It is unethical for a doctor to allow any third element to come between him and his patient. Nothing must interfere with the patient-doctor relationship because this always, in turn, interferes with the use of the doctor's medical knowledge and skill and causes a deterioration of medical care. Only a doctor may practice medicine; no organization can do so, nor can it dictate to an individual doctor the use of his medical judgment. Most states recognize this fact and have laws against the corporate practice of medicine. No lay company, no board of directors, no hospital, and no college may hire a doctor and have him practice for them, charging for his services. Any doctor who hires himself to practice for a corporation, or who in any way allows a third party influence to come between him and his patients, is unethical. It is ethical, however, for a company to furnish an emergency clinic or hospital for its employees and to hire a doctor to work therein, provided they do not enter the corporate practice of medicine by charging the employees for the doctor's services, and provided they do not interfere with the service the doctor renders.

Section 7

Practicing physicians must derive their income from recompense for medical services rendered to their patients. Charges should be commensurate with services rendered and within the keeping of what the patient can afford to pay.

Apparently, an exceedingly small percentage of doctors practice medicine as a business only, but an even smaller percentage do have the true missionary spirit and are imbued only with the idea of service to mankind. Most doctors practice medicine because they would neither be happy nor satisfied with life doing anything else.

From the ethical standpoint we must create the proper attitude within ourselves concerning the financial side of practice. One that will prevent us from ever being hardboiled, and yet will keep us from becoming careless and being imposed upon by unscrupulous patients. There are many reasons for such self protection of which the general public does not seem to be aware.

Doctors must have a college education, followed by four years in medical college, and then by three to five years of internship, residency, and special training. These 11 to 13 years of instruction are

costly. It is only fair that a doctor should have some return on his investment. In addition to that, he must pay all expenses attendant upon his practice, including salaries of people who work for him. He and his family must live. A doctor must use correct business methods so that he may care for all of the above. Following are some other aspects of the financial side of the practice of medicine from the standpoint of ethics.

It is unethical to accept commissions or rebates on prescriptions or any material sold to patients. Fee splitting under any guise is unethical. No doctor may pay or receive from another doctor a fee for the referral of a patient. The ownership of a drugstore by a doctor to which he sends patients to have prescriptions is frowned upon, but not absolutely prohibited. It is recognized that in some communities it may be necessary for a doctor to dispense his own drugs or to establish a drugstore and supply necessary appliances.

Section 8

A physician should always seek consultation when he needs it or when it is requested by the patient or his family. At times, the tension of the circumstances surrounding a patient makes it advisable to ask for consultation and, if possible, it should be suggested before the family asks for it.

The method of consulting and charges for the same vary under different circumstances in different communities. A doctor must never fail to call for a consultation when he needs it, and even if the patient can't pay for it he must never fail to go in consultation if he is called and told that the patient can't pay. However, if a patient is going to pay anything to his regular physician, he should also pay the consultant something. If a doctor is called in consultation he should not accept all the patient can afford, but must leave something for the doctor who is doing most of the work. Under ordinary circumstances, a consultant should charge what is customarily charged for the time and responsibility required.

When a doctor is called in consultation, it is not only courteous but best for the patient and for the regular physician to meet the consultant and give him all available information before he sees the patient. If this be impossible, the consultant should be given the information over the telephone and the two doctors should confer again after the consultant has examined the patient.

If there be too much disagreement as to the diagnosis or as to necessary treatment, the family must be told and either another consultant is called

to settle the disagreement or the family is requested to decide which physician they desire to treat the patient.

In some instances the doctor on the case requests the consultant to discuss with the family his diagnosis and suggestions. In consultation, as in all medicine, the prime object is the good of the patient and the personalities of doctors must not be considered.

Section 9

An ethical physician never violates a patient's confidence. He never reveals to anyone what he has been told or what he has found on examination without the patient's request or his consent. Some patients have said to me, "I can't go to my local doctor because he tells his wife everything and she discusses it at the bridge table." A doctor's wife should never be told anything about his practice except where he is going to make his calls, the patient's telephone number, and the approximate time he is going to be at each given place. One of the best advertisements a doctor can have in any community is for people to ask his wife about a patient and have her reply, "The doctor never tells me anything about any patient." One of the best ways to lose patients is to talk about them.

A doctor must make a hard and fast rule of not violating a patient's confidence except under the following conditions: First, when the law requires the reporting of a patient's name, address, and diagnosis to safeguard the health of the community. Second, when it is necessary to tell some member of the family in order to safeguard the health of the patient or of someone else. Third, when a court of law subpoenas a patient's hospital record or a doctor's chart.

Section 10

A doctor's responsibility to the public, to the community in which he lives, and to society as a whole may be expressed as follows:

First, the fulfilling of his obligations to his individual patients.

Second, assisting in the health education of the patient and of the public.

Third, participating in activities which have the purpose of improving the health and well-being of the community.

Last, the doctor should remember that he, also, is a citizen and should, by his interest and activities in civic affairs, be a good one.

The first and second of these have already been discussed. As to the third, in any doctor's life opportunities will arise to support public health activities, to take part in them personally, and to encourage the public to do the same. In addition, all doctors will treat some patients without charge and

will assist in the care of patients in public hospitals and free clinics of various kinds.

As to civic affairs, the needs and opportunities for action will vary in different towns, but they will present themselves. We refer here not only to voting and taking an active interest in good government, but to all other activities—civic, political, and religious—which are necessary to make the community, our nation, and the world a better place in which to live.

Moral Turpitude

In addition to the above, both from the professional standpoint and that of his personal life, a doctor must never commit any action which might suggest a lack of sincerity, a lack of integrity, or even a hint of moral turpitude. This includes his attempting any procedure or any practice for which he is not prepared, the performing of unnecessary operations, or the use of therapeutic measures which are not indicated or which are unnecessarily expensive. We have already mentioned the fact that it is both dishonest and unethical for a doctor to accept commissions on prescriptions or a rebate on any material bought for a patient. It is unethical and illegal to interrupt a pregnancy unless it is necessary for the health of the mother, and then only after consultation and agreement between three doctors with their statements in writing that it is necessary.

In addition to the above, we must be careful to prescribe narcotics only for relief of acute pain or for conditions which are incurable. We cannot prescribe them for habituees except in medical emergencies. Also, no doctor should ever prescribe narcotics for himself. Doctors are human and may become addicts like anyone else. By the same token, a doctor should be careful never to become an alcoholic.

Concerning moral turpitude, we can say that although professional interest is necessary for all patients, a doctor's attitude toward a female patient should never extend beyond this point.

Unfortunately, even when we have done the very best we can to serve our patients well, to be ethical, and to avoid all semblance of anything simulating moral turpitude, complaints against doctors from patients come to medical societies. At the present time most of our medical societies have grievance committees to which patients may take complaints about any member of the society. These complaints must be in writing and must contain specific details. If desired, these committees give the patient a personal hearing. They communicate with the doctor who, in turn, must give the committee the facts he can, also in writing. If necessary, the patient and doctor meet together with the committee. The com-

mittee then decides what is best to do, and here again the doctor must cooperate to settle the matter. In this way misunderstandings are straightened out, the doctor may be exonerated or may be adjudged wrong as accused; fees may be adjusted; in any case, the matter is settled. The work of these grievance committees has done much to improve our relations with the public.

To take care of one doctor's complaint against another doctor, medical societies have judicial committees or professional conduct committees. Our state society also has a professional conduct committee, composed of the five immediate past presidents, to care for complaints of doctors against doctors, or patients against doctors when the local committees cannot settle them.

In the event both the county and the state medical society fail to settle these matters satisfactorily, the state society or the individual society filing complaint may appeal to the American Medical Association for help. These grievance committees find that most trouble arising between doctors, or between doctors and patients, are due to misunderstandings.

In addition to the concern for his own conduct, it is advisable for a doctor entering practice to know what he may expect from patients and from other doctors. Most of our patients are appreciative and understanding, are willing to pay a reasonable fee, and do the best they can about paying promptly. However, there are certain actions which may be expected from a minority of patients who are selfish, inconsiderate, and at time apparently actually dishonest. We will discuss briefly some of these types of patients who, as mentioned above, fortunately represent a small minority.

Some patients think it is not dishonest to obtain money which they do not deserve from an insurance company, from the government, or from a business firm. They attempt to make the doctor a partner in the deal and declare that if he does not sign the papers in the right manner, he won't receive anything for his fee. Other patients demand a lot of attention but are careless about taking treatment, place all the responsibility for their illness on the doctor, refuse to pay anything, and libel the doctor to other people and to other doctors.

A few for whom you work the hardest and achieve the best results, apparently misunderstand everything you do and pay nothing. Occasionally, a patient will demand X-ray and laboratory examinations which some layman told him he should have, and then refuse to pay for them because the examinations didn't show what he expected. Some children demand medical attention for their parents and refuse to pay for it.

An interesting attitude is found in the children

of families whom a doctor has treated for years without charge. When the children are grown and can pay a doctor, they go to another one. Some of our most "intelligent" patients will delay paying a bill because it is small, until the cost of sending statements becomes more than the amount of the bill.

A few patients have no consideration for other patients, for a doctor's time, or for his home life. Although the patient may have been ill for many days, he will call the doctor for emergency visits during office hours, at mealtime, at night, or while the doctor is eating his Christmas dinner with his family. These occurrences, or similar ones, will come to every practitioner. No matter what happens, it is wise for a doctor never to lose his patience, never to lose his temper, nor to become sensitive and hurt about anything that happens in the practice of medicine. He must learn to accept any kind of demand the patient makes, analyze it from the standpoint of what he would be thinking or feeling under similar circumstances, and respond as quickly, as easily, and as fully as possible.

Code For Patients

I have worked out a code which I attempt to teach my patients. It may be expressed as follows:

1. I will remember that my doctor has other patients besides myself and I will be considerate of that part of his time that belongs to them.

2. I will remember that, like myself, my doctor is a human being and does need some association with his family and some rest and recreation.

3. I will have a yearly health examination, take care of my health, and not wait for treatment until I am in a serious condition then expect my doctor to produce miracles.

4. When I go to a doctor I will study my case with him, carry out his instructions intelligently, observe the effects of the treatment, and cooperate with him in making changes as necessary.

5. When I have accepted a doctor's services, if I am financially able to pay standard charges, I will do so promptly and without quibbling. If I am not able to pay these charges, I will tell the doctor at once and arrange terms commensurate with my financial status. If necessary or desirable, I will do this before accepting services.

6. If I decide to leave the doctor who is caring for me, I will inform him of my decision and give the reason for it. If his knowledge and experience may be of help to my next doctor, I will request a resume of my record for him.

7. If I have a misunderstanding with my doctor, I will select another physician instead of continu-

ing to go to the doctor and talk about him behind his back.

8. I will not interfere with the treatment of patients who are under the care of ethical and competent physicians and who are not my responsibility. If I desire consultation for a sick friend when in the opinion of the family and doctor in charge it is not necessary, I will request it, pay for it myself, and not penalize my friends financially in order to satisfy my own peace of mind.

A doctor entering practice may be confused or may misunderstand what he hears about other doctors, hospital staffs, and the like. Doctors are individualists and may interpret our code of ethics differently. When I started practice I was bewildered by some of this gossip and rumors, such as about cliques in hospitals, cliques in the medical societies, cliques in private practice, old doctors showing jealousy of young ones and young doctors getting a practice in any way they could, consultants taking away patients, and the like. There were whispers of unnecessary operations, split fees, excessive fees for the income of some patients, and cruelty in collections by some doctors regardless of circumstances of patients. It was reported that physicians, without investigating, told patients that charges by other physicians were far too high. Some physicians took a look at the treatment prescribed by another doctor, looked horrified, then made practically no change in the treatment.

After being astounded by all of these rumors I found out that most of them were wrong. All the older physicians helped me in every way they could. Some of them sent me patients. Some gave me calls to make for them, making a show of asking me to help them out but, in reality, giving me an opportunity to make a little money that I needed badly. Every older doctor I ever called in consultation helped me in every way he could and not a single one ever stole a patient from me. Some even went out in consultation at night or in the early morning hours without receiving a fee for it, just to help out a young doctor.

Patients did leave me, but through my own fault. Some of them left me because I failed them in service, others because of my own temperament which didn't suit them, and some of them just wandered around. Later on, I understood that resentment toward other doctors to whom my patients went was really resentment against my own deficiencies, so I stopped feeling any resentment and tried to learn from my own errors.

Concerning the so-called cliques in medicine, I came to the conclusion that it is perfectly natural for the staff of a certain hospital to work together.

Physicians who graduated at the same school undoubtedly have associations in common.

Code For Physicians

Taking into consideration all of the above, I finally established the principles for a practical ethical code for my own conduct as follows:

1. I will under all circumstances try to understand my patients' needs from every possible standpoint and will endeavor to meet unselfishly the needs of each individual patient.

2. I will never violate the confidence of a patient.

3. I will remember at all times that medical ethics are for the benefit of the patient and will always conduct myself on this basis.

4. I will never damn a fellow practitioner with faint praise. I will either say nothing at all or tell the truth, that is, I will either say the doctor is competent in such a way as to be evident that I mean it, or I will say that he is incompetent and be prepared to back up this statement publicly.

5. In consultation, true to the spirit of our own professional code, I will serve the patient and help the doctor with the truth as I see it. When a consultant, I will give all that I can. When the other doctor is the consultant, I will use whatever advice he has to give, provided it is correct. If I can't accept it, I will so state and allow the patient to choose which advice he wishes to follow, or allow him to call in a third doctor.

6. If I am called to see a patient under the care of another physician, I will not go unless called by the doctor, except in cases of emergency. Then I will see the patient, tell the family that I am glad to help in their doctor's absence, and that I am sure he would be glad to do the same for any other doctor. Later, I will call the doctor and tell him what has been done. If I unknowingly see a patient under the care of another doctor, I will immediately call that doctor and only if the patient's doctor so requests shall I continue to treat the patient.

If some patient comes to me after having recently gone to another doctor, with the patient's permission I will call that doctor and tell him about it, and ask for a resume of his findings and for any information he may consider useful in the care of the patient. If patients leave me and go to another doctor, I will not get hurt with them or blame the other doctor, but will reciprocate with the doctor as stated above.

8. If patients who have a family doctor come to me as a specialist, with the patient's permission I will send a full report to that doctor so he may also use such information for the patient's benefit.

9. If a patient comes to me because of a misunderstanding with his regular physician, I will endeavor to determine the cause of the misunderstanding, straighten it out if possible, and send the

patient back to his regular doctor. In such cases, no charge will be made for the visit or office call.

10. When someone accuses a doctor of malicious conduct toward me, I will give the doctor the benefit of the doubt. Someone may have lied or may have misunderstood, may have exaggerated, or may have been honest but mistaken. I realize that I also get accused in a similar way. Under no circumstances will I harbor resentment against patients or other doctors, or allow hate to live in my soul. Even from a selfish standpoint this is not desirable because it does not right a wrong and does ruin the one who hates.

11. Never will I be envious or jealous of another doctor but, within myself, will rejoice over his success, feeling it belongs not to him alone but to the profession as a whole and, therefore, partly to me. This will develop a unity of purpose with all doctors working together for the good of the whole.

In closing, I may say that medical ethics exemplifies the principle that what is best for one is best for all. What is best for the patient is best for the doctor, and what is best for the doctor is best for the patient. What is best for one doctor and for medicine as a whole is best for all doctors.

Medical practice and the treatment of any individual should be based on complete cooperation between the doctor and patient in principle, understanding, and in detail of procedure. Under all circumstances the doctor must think and feel with the patient, visualizing within himself the patient's suffering—physical, mental, and emotional. Compassion and human understanding, added to a physician's scientific knowledge, bring the healing art to its highest fulfillment.

AMA TO SURVEY LEGAL PROFESSION

A SURVEY OF ATTORNEYS on various subjects of mutual interest to physicians and lawyers will be conducted early this fall by the AMA's Law Department. Approximately 10,000 lawyers will be asked to answer questions on interprofessional relations, medical professional liability, and expert medical testimony. The need for such a study is evidenced by the fact that as high as 80 per cent of all cases tried today require medical testimony and that seven out of ten personal injury cases tried today are decided on medical rather than legal considerations. The medical profession should be aware of the problems of attorneys and the role of medicine in the judicial system. It is hoped that this information can be used to promote good working relations between physicians and attorneys.

This presentation discusses briefly the adrenocortical lesions of surgical significance including their important clinical manifestations with a few special diagnostic methods. The surgical approach and treatment of these lesions is outlined along with comments regarding prognosis.

SURGICAL LESIONS OF THE ADRENAL CORTEX

Ben R. Thebaut, M.D., *Atlanta*

THE ADRENAL CORTEX arises from the celomic epithelium near the origin of the germinal epithelium of the gonads. Its hormones are numerous and varied and have attracted increasing interest in recent years. Approximately thirty steroid hormones of the adrenal cortex have been isolated and identified to the present time. These may be conveniently grouped as follows: (1) those affecting electrolyte and water metabolism; (2) those affecting carbohydrate, protein, and fat metabolism; and (3) those producing gonadal effects, both male and female.

From a physiological standpoint, the surgical lesions of the adrenal cortex may be roughly divided into two groups: (a) the non-functioning and (b) the functioning type.

In the non-functioning category, the most frequent lesions are carcinomas with benign adenomas and sarcomas occurring less frequently. Other more rarely encountered tumors are hemangiomas, lymphangiomas, lipomas, neurofibromas, and benign cysts. The lesions in this group are usually asymptomatic until they reach a large size or, in the case of malignant lesions, metastasize. Consequently, the diagnosis in this group is usually made late, by accident or at autopsy.

In the functioning lesions, hormonal excesses usually permit relatively early recognition of the disease and the changes which they produce in the patient usually will command attention. As a result, this group assumes major importance from the surgical standpoint.

These functioning lesions may be subdivided into types according to their hormonal effect and may be further classified as non-neoplastic (cortical hy-

pertrophy and hyperplasia), and neoplastic lesions (which include benign adenomas and carcinomas).

Actually, there is often little correlation between the hormonal activity of these lesions and their cytology. For example, the adrenal cortex which microscopically cannot be distinguished from the normal may be responsible for profound endocrine effects in the patient. The pathologist may also find it difficult at times to definitely determine whether or not a given neoplasm of the adrenal cortex is benign or malignant.

The most commonly recognized clinical syndromes which these functioning lesions produce are the adrenogenital syndrome and Cushing's syndrome. Mixtures between these types are not infrequent. Recently a new adrenocortical syndrome has been described by Conn and Louis. They have applied the name "Primary Aldosteronism" to this entity.

In the adrenogenital syndrome, there is characteristically an increase in the production of sex steroids. Their effects depend upon the type of hormone produced and on the age and sex of the patient. With androgenic lesions in the very young, pseudohermaphroditism is often produced. In female children the clitoris may be enlarged at birth or become prominent in early infancy. Precocious development of pubic hair having a male distribution and considerable confusion as to the actual sex of the child has frequently occurred. In adult females there is a change from femininity to masculinity with changes in body contours to the male type and the appearance of hirsutism. The uterus becomes small and the clitoris enlarges. The voice deepens. In the pure type, the blood pressure and other metabolic processes which are altered in Cushing's syndrome remain normal.

Syndromes representing excess estrogenic activity

are rare but are recognizable when they occur in males because of feminization, including gynecomastia, obesity, loss of libido, and atrophy of the genitalia.

In Cushing's syndrome there is predominantly an over-production of the cortins affecting metabolism. It is characterized by hypertension, obesity of the face, thickening of the neck, and obesity of the trunk with large abdomen and small buttocks. Reddish-purple striae of the abdomen and flanks are common. Purpuric and acneform dermatitis, polycythemia, lymphopenia, osteoporosis, and a decreased glucose tolerance curve are frequently seen. It is much more prevalent in women than in men and is seen occasionally in children. By far the greatest majority of patients with Cushing's syndrome have been found to have bilateral adrenal hyperplasia. However, in a series of 22 patients with Cushing's syndrome reported in 1952 by Poutasse and McCullagh, approximately one-fourth of the patients were found to have either a cortical adenoma or carcinoma of one adrenal gland. When Cushing's syndrome is associated with tumor, it is most frequently carcinoma. In the pediatric age group, Cushing's syndrome is almost always caused by malignant tumors of the adrenal gland. In 1956, Guin and Gilbert reported the youngest patient with this entity thus far recorded. This child was three months of age when first seen by the authors and the history indicated an onset of symptoms at the age of six weeks.

Primary aldosteronism is due to the production of excessive amounts of aldosterone by the adrenal cortex, as shown by Conn and Louis. The entity had been previously called "potassium-losing nephritis." It is theorized that this substance binds sodium within the cells which results in a resistance to the repletion of potassium. Consequently, there is a hypernatremia with a hypokalemic alkalosis. Serum calcium is normal. The urine is persistently alkaline and contains small amounts of albumin. This syndrome, therefore, is one "involving an interesting disturbance of electrolyte metabolism." Among its clinical manifestations are periodic attacks of severe muscular weakness, tetany, polyuria, and hypertension. There is no edema.

Diagnosis

The diagnosis of functioning lesions of the adrenal cortex is based primarily on a careful history, physical examination, and on laboratory and X-ray investigations. Consideration in the differential diagnosis must be given to lesions which can produce strikingly similar symptom complexes such as pituitary basophilism or true Cushing's disease, tumors of the pineal and of the thymus, arrhenoblastomas and other virilizing tumors of the ovary, and dis-

turbances of extra-adrenal cortical rests.

Of particular interest and importance in diagnosis is the determination of the 17-ketosteroids and 17-hydroxycorticoids in a 24 hour urine specimen. Normal values for the urinary 17-ketosteroids vary with the patients age and sex. In adult females the normal excretion of this substance varies between 4 and 10 mg. per 24 hours. The normal range of 17-hydroxycorticoids is 4 to 6 mg. per 24 hours. Increased values, particularly in females, are indicative of cortical steroid excesses. In males, approximately three-fifths of the urinary 17-ketosteroids are derived from metabolites of the adrenal cortex, testicular activity accounting for the remainder. In the non-hormonal tumors, these substances are usually normal. The highest levels of the urinary 17-ketosteroids occur in patients with adrenogenital syndrome due to carcinoma. Recently it has been demonstrated that the administration of ACTH will increase and cortisone will reduce the urinary excretion of 17-ketosteroids and 17-hydroxycorticoids in patients with adrenal cortical hyperplasia whereas, in patients with adrenal cortical carcinomas, such response does not occur. In benign adenomas there is considerable variation in response to ACTH and cortisone. The determination of alpha- and beta-17-ketosteroids in the urine may serve as further differential diagnostic aids. Whereas the alpha-fractions are formed by both the adrenal cortex and the testes, the beta-fractions are produced only by the adrenal cortex. It has been suggested that an increase in the excretion of beta-17-ketosteroids occurs commonly in adrenal cortical carcinoma. In pure types of Cushing's syndrome, excretion of 17-hydroxycorticoids is elevated while 17-ketosteroid excretion is usually normal or only slightly elevated. In cases presenting a pure adrenogenital syndrome, the 17-ketosteroids are high and the 17-hydroxycorticoids are normal.

Special radiologic techniques have proven to be of considerable value in diagnosis of adrenal tumors. Intravenous pyelograms, of course, should be obtained routinely. Retroperitoneal pneumography is particularly helpful in these patients. Although the dangers of gas embolism from this method have been stressed, the use of the presacral route of injection and the substitution of pure carbon dioxide gas for air, helium, or oxygen as the contrast agent has minimized this danger. Recent studies indicate that up to 100 cc. of carbon dioxide gas can be introduced rapidly intravenously, without producing evidence of gas embolism or other ill effect. Other radiologic techniques which have been used for demonstration of adrenal lesions include laminography, translumbar aortography, and contrast studies using barium for evidence of displacements of adjacent portions of the gastro-intestinal tract.

Surgical exploration of the adrenal glands is the ultimate step in diagnosis of these lesions, prior to their actual removal. When this method is used without preliminary X-ray visualization of the adrenals, it is usually advisable to explore both glands simultaneously.

Surgical Approach

The surgical approach is determined by the preference of the surgeon and by the type of lesion anticipated. The four approaches commonly used are: (1) The transabdominal approach. This permits exploration of the abdominal cavity and pelvis as well as both adrenals. (2) The classical flank or posterolateral approach as used for nephrectomy. This affords only fair exposure of the adrenal glands although it has the advantage of wide familiarity. (3) The posterior lumbar approach which was popularized in 1936 by Young. He devised a self-retaining retractor to facilitate bilateral exposure of the adrenals through this route. It has been used extensively for adrenal surgery that did not involve the removal of large tumors. It provides relatively poor exposure. (4) The transthoracic or combined thoraco-abdominal approach which allows excellent exposure of the adrenals. With such exposure, the operator has ready access to the large vessels entering the gland on its superior and medial aspects as well as to the major vascular pedicles and to diaphragmatic adhesions commonly encountered with tumors.

Although Parker, in 1952, reported the removal of a benign cyst of the right adrenal using a transthoracic approach with removal of the tenth rib, a search of the literature has failed to reveal a description of a thoraco-abdominal approach to the adrenal, utilizing the tenth intercostal space.

Such an approach was recently used by us to remove a large functioning adenoma of the left adrenal gland. It is worthy of mention because of its simplicity, because it does not require removal or cutting of a rib or costal cartilage, and because the adrenal gland is immediately beneath the site of incision, making access and exposure perhaps unequaled as compared to other approaches. Furthermore, by comparison, it minimizes the postoperative incisional pain in the patient.

The technique is briefly described as follows: with the patient in a lateral decubitus position, the incision is made overlying and parallel to the tenth intercostal space from the angle of the ribs posteriorly to a point 5 to 10 cm. anterior to the costal arch. The subcutaneous tissue, abdominal muscles, extra-costal and intercostal muscles, the diaphragm, the pleura, and the peritoneum are all opened in

line with the skin incision. With the rib-spreading instrument in position, the adrenal gland is well exposed. If desired, the abdominal portion of the incision can be used for exploration of the abdominal cavity, palpation of the opposite adrenal gland, and of the pelvic viscera. Closed drainage of the pleural cavity can be easily instituted by inserting a catheter one to two interspaces above the incision.

The actual surgical attack on the adrenal glands will obviously be influenced by the preoperative investigation and provisional diagnosis and upon the operative findings.

In cases of bilateral cortical hyperplasia, a one-stage simultaneous approach to both adrenals is preferable. In this instance, if the syndrome is of the Cushing's type or the adrenogenital type, it is our belief that a total adrenalectomy should be done on one side and approximately 80 per cent of the opposite gland resected at the same stage but if the syndrome is that of primary aldosteronism, it is perhaps wiser to do a bilateral total adrenalectomy as suggested by Conn.

In the case of adrenal cortical tumor, the procedure of choice is total adrenalectomy on the affected side. Simple enucleation of the tumor is less desirable because of the high reported incidence of carcinoma in such tumors.

Prognosis

In patients with Cushing's syndrome, due to benign adenoma or to bilateral cortical hyperplasia, the prognosis is generally good, provided sufficient adrenal resection has been accomplished in the hyperplastic group and provided there is careful planning and execution of therapy with cortisone or its related compounds before, during, and after operation. It is noteworthy that prior to the availability of these steroid compounds, the surgical mortality reported in this syndrome has varied from 30 to 50 per cent, Walters claiming 34 per cent. Most of the deaths resulted from acute cortical insufficiency in the early postoperative period. In 1956, Walters reported a reduction to seven per cent surgical mortality in his more recent series of 100 patients with Cushing's syndrome. As high as this figure may seem, it must be recalled that without effective surgical treatment, patients with Cushing's syndrome have a shortened life span and many disabilities. It is expected that future reports will indicate still further improvement in mortality statistics for this group of cases.

In patients with adrenogenital syndrome, due either to bilateral cortical hyperplasia or to benign adenoma, the prognosis is good and the surgical mortality rate is low. The regression of sex changes following surgery is unpredictable although definite

improvement generally ensues. A period of many months is required for adjustments to a changed hormonal status. Women who have shaved because of facial hirsutism usually must continue to do so. In patients with primary aldosteronism, nine cases cited by Conn which were due to adrenal cortical adenoma and which were removed at operation were cured of their disease. One case without adenoma mentioned by Conn was reportedly cured by bilateral adrenalectomy.

All cases with carcinomas, whether functioning (regardless of the syndrome produced) or non-functioning, carry a very grave prognosis. Among the benign non-functioning lesions, the prognosis is usually good.

Summary

The surgical lesions of the adrenal cortex including their important clinical manifestations, a few helpful diagnostic methods, and the surgical approach and management of these lesions are discussed. The operative technique of a thoracoabdominal approach utilizing the tenth intercostal space, simple in execution and offering ideal exposure for unilateral adrenal lesions, is described. Finally, a few comments are made relative to prognosis.

1293 Peachtree Street, N.E.

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THE RIGHT OF FREE CHOICE

THE NATIONAL CONFERENCE on Labor Health Services recently met in Washington, D. C. A series of speakers strongly criticized the medical profession, as represented by the American Medical Association.

Back of this lies a long-standing controversy which may be complicated in some of its details but is simple in principle. Certain unions, through their health and welfare funds, are "merchandising" medical care. The principal Fund, that of the United Mine workers, covers 250,000 workers and their families and owns and operates ten hospitals staffed with salaried doctors. The unions, with their control of the money, are able to control the type of services rendered, who will render them, and the amount paid for those services.

The crux of the problem is that the beneficiary is denied a basic right—that is, the right to choose

his own physician and, if he so wishes, to change that physician when he feels that another can give him better care. He must accept the physician selected by the Fund. Often he must travel considerable distances to obtain services of Fund-approved doctors, and that in itself is a deterrent to good medical care. And the monopolistic controls exerted by the Fund discourage well qualified doctors from entering or remaining in practice in the areas concerned.

The medical profession's position on this matter is one of basic principle. It insists on the right of the patient to choose his own doctor. And this right, it has been accurately pointed out, has been almost as much a part of our traditional freedoms as the right to choose one's own religion, or to speak or vote as one pleases.

Carrollton Times—Free Press

THE VALUE OF THE OCULAR FUNDI IN HYPERTENSION

M. Hobson Rice, M.D., *Decatur*

IT HAS BEEN of interest to me since starting out in the practice of ophthalmology and being associated with a large practice, how rarely we get a patient referred for evaluation of his fundus regarding the state of his hypertension. However, when I gave this more thought, it became obvious that this is the way it should be. It means that the doctor who is taking care of the patient must be doing it, and since he is familiar with the state and degree of hypertension, the degree of renal involvement, the treatment the patient has received, and his response to it, he should be the most qualified to evaluate the fundus.

This subject, however, is of considerable interest to the ophthalmologist, as attested by the wealth of interesting, enlightening, confusing, and conflicting material that appears in the ophthalmic literature. It is my purpose to try and briefly review some of this material, and in doing so, be of aid to you in evaluating your patient with hypertension. In general, I would like to approach the subject from a more clinical, and what I feel to be a more realistic, point of view than the Keith-Wagner classification allows.

Clinical Picture

Needless to say, the best way to diagnose pathologic changes in the fundus is to be completely familiar with the appearance of the normal, and this means the routine examination of the fundus through a dilated pupil (one per cent Paradrine is a good office mydriatic). Of almost equal importance is to know what changes to look for and expect on the basis of the patient's condition.

The basic change in the vascular tree in hypertension is one of generalized hypertonus, resulting in a generalized constriction of the arterioles. Sec-

A careful examination of the ocular fundus is an essential step in the intelligent management of hypertension.

ondary to, and sometimes preceding, the onset of the hypertension there invariably develops varying forms of vascular sclerosis which may in the long run be the most important of these two main features.

Leishman¹ has suggested that those patients having primary or essential hypertension can possibly be placed into three clinical groups on the basis of their hypertensive history, physical examination, and fundus picture.

Group 1: Those patients in which the onset of hypertension is rather late in life, the fifth decade or beyond, or in younger patients who have undergone premature ageing of their vascular tree. These patients are more likely to have in common an involvement of the arterial system with what has been described by Allbutt² as senile or involutionary sclerosis. This is defined as an ageing process affecting arteries and arterioles, and appearing histologically as a relative or replacement fibrosis of patchy distribution. It is not related to hypertension but may be associated with it. I shall refer to this condition as fibrosis.

The retinal picture in the non-hypertensive is one we see everyday in the older age group. The background fundus shows senile changes such as loss of luster, pigment disturbances, and the presence of colloid bodies. The arterioles are relatively straight and diffusely narrow, with acute angle branching, and diminished color of the blood column. Histologically this appearance is hard to explain and may possibly be due to a lowered peripheral pressure resulting from rigidity in the larger arteries.

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From the Department of Ophthalmology, Emory University School of Medicine and The Grady Memorial Eye Clinic, Grady Memorial Hospital.

With the onset of hypertension in these patients the picture changes. The areas involved in fibrosis tend to dilate passively under an increased peripheral pressure and the uninvolved areas tend to constrict. This results in a picture of increased tortuosity with areas of dilation and constriction. Crossing changes are not marked and consist largely of tapering of the veins and occasionally some engorgement of the veins distal to the crossing. With time, the fibrosis tends to progress involving the hypertonic areas and the whole vessel tends to appear dilated or larger than expected, very similar to what one would expect to see in a younger person.

In general, this group of patients seems to tolerate their hypertension better than does the next group to be discussed. The pre-existing fibrosis seems to prevent the development of high diastolic pressures which are necessary for the more severe vascular damage. The clinical picture is characterized by a systolic pressure around 200 mm Hg. and a diastolic pressure between 95-120 mm Hg. The patient usually gets into trouble as a result of a vascular accident due to a sudden increase in the systolic pressure.

Group II: The second group of patients are those whose vessels are essentially uninvolved by pre-existing fibrosis at the time of onset of their hypertension. The first change in the appearance of the retinal arterioles, as one would expect, is that of hypertonus, resulting in a generalized narrowing and straightening of the arterial tree with a diminished intensity to the color of the blood column, very similar to the previously described normal senile fundus. There are usually no crossing changes. The picture is reversible with early control of the hypertension.

If the hypertension is allowed to persist or the stimulus is more severe, the picture progresses to one resulting in reactive or arteriolar sclerosis, which is said to be always associated with hypertension and usually with a diastolic pressure of 130 mm Hg. or higher. In these cases hypertonus is followed by hyperplasia, which produces a thickened arteriolar wall and a narrowed and irregular blood column. Crossing changes are more marked due to the increased thickness of the wall which may result in obliteration of the vein. If progression continues, hemorrhages and areas of retinal ischemia or "cotton-wool patches" appear. The light reflex is increased in the areas of sclerosis.

Group III: In these patients the hypertensive stimulus is unusually severe and has been termed malignant, fulminating, or accelerated hypertension. Usually, when first seen the fundus shows far advanced retinopathy with hemorrhages, cotton-wool patches, marked crossing changes, and the classical

papilledema. The diastolic pressures reach very high levels. Pathologically the retinal arterioles show focal areas of acute arteriolar necrosis.

The question now arises as to how these findings can aid in the clinical evaluation of the patient. This can best be discussed under several headings.

Etiology

The fundus picture is not of much aid in determining the etiology of the hypertension when it is not otherwise apparent. While it has been said that the retina shows more edema with renal disease, a recent study³ reported that the pathologic and clinical picture of the retinal arterioles were found to be essentially the same in 90 hypertensive patients on post-mortem examination. These included cases of essential hypertension, chronic glomerulonephritis, pheochromocytoma, and adrenal adenoma. A clinical impression that has been frequently reported is that an excess of cotton-wool patches in relation to hemorrhages and other changes, should make one suspect lupus erythematosus as the etiology of the hypertension.

Prognosis

Ten years ago, or even more recently, the clinician could make a good estimation as to the prognosis in a case of hypertension on the basis of the fundus picture, especially if papilledema was present. But since the methods of treatment have so greatly improved, this is no longer reliable.

Treatment

The area in which evaluation of the fundus can be the most useful is in aiding to determine the course of treatment to be followed and in evaluating the patient's response to this treatment. The course of treatment can, in general, be determined according to the group in which the patient can be classified.

Those patients in group one with senile fibrosis have the problem of maintaining adequate peripheral circulation in vessels that are relatively rigid. Therefore, a slight degree of systematic hypertension is probably beneficial. In general, active measures to promote hypertension do not seem indicated in this group but, in fact, may be dangerous. These patients should, however, be protected against sudden significant elevations of the systolic pressure, as this may result in rupture of a vessel. Over exertion and excessive fatigue should be avoided as should prolonged bed rest. The patient should be encouraged to live an active life of moderation. Mild sedatives may be required to control nervous or physical overactivity.

In contrast, the cases of malignant or fulminating hypertension demand all the tools available to pro-

duce rapid control of the pressure. In general, complete bed rest in conjunction with either hypotensive drugs and/or surgery of the sympathetics is indicated. It is not within the province of the ophthalmologist to choose between these alternatives — good results have been reported with both.

Finally, the group two or severe hypertensive falls between these extremes. Here the presence of arteriolar sclerosis secondary to the hypertension may make severe hypotensive measures dangerous, especially if there is evidence of much fibrosis in addition to the sclerosis. Bruce⁴ has reported a case of bilateral blindness of sudden onset following the use of intramuscular hexamethonium, associated with a fall in the blood pressure from 260/160 to 180/110.

In general, the goal should be to attempt to reduce the diastolic pressure to approximately 120 mm Hg. in an attempt to prevent the necrotizing effect on the arterioles of higher pressures. There is some evidence that lower levels may accelerate the development of atheromatous lesions, resulting in vascular occlusions.¹ By this approach it is hoped that time for the development of protective fibrosis will be allowed and the patient converted to a group

one classification even though the pathogenesis is different.

Since the retinal changes due only to hypertension (hypertonus, hemorrhages, cotton-wool patches, and even the hard exudates which do occur) are reversible, the fundus is very convenient and practical for following a patient's response to treatment. The fundus picture of malignant hypertension has been reversed to a practically normal fundus with the newer means of treatment.

I am sure that my presentation of a somewhat different approach to the evaluation of the fundus in hypertension has been of necessity short and in many ways incomplete. I would like to refer you to an article by Dr. Robert Leishman, appearing in the November 1957 issue of the *British Journal of Ophthalmology* for a more complete presentation of some of the points I have discussed.

542 Church St.

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H. Moberhan, M.D.	Research Fellowship	3,600
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A. Bleakley Chandler, M.D. Ass't Professor of Pathology	Experimental Studies of Thrombosis Using a New Technique for the In Vitro Production of Thrombi	6,050
		<hr/> \$24,700

ABDOMINAL PAIN

James E. Anthony, Jr., M.D., *Decatur*

*A review of the mechanisms of abdominal pain with
a critical evaluation of physical signs and symptoms.*

THERE ARE A NUMBER of different patterns of abdominal pain. Many times these patterns may be difficult of interpretation, but if the clinician is thinking anatomically and physiologically, he can usually maintain his equilibrium. It is certainly true that clinical diagnostic ability has not kept pace with surgical technique or care. Part of this lag may be due to the difficulty in recognizing the true significance of abdominal pain as a symptom.

Although the abdominal viscera are supplied with nerve fibers similar to those in the skin, they are smaller and are poorly conditioned to the type of stimulus received by the skin. During infancy these fibers become conditioned to the type of stimulus they will receive and normally respond only to distention and/or contraction; the rate being more important than the degree. One needs a strong stimulus to produce mucosal pain. When mucosa is inflamed and congested, however, as in a gastrostomy, less potent stimuli may produce pain.

Judovich and Bates have divided abdominal pain into three types. (1) Purely visceral pain, (2) somatic or parietal pain, and (3) referred pain.

True visceral pain travels over afferent visceral nerves accompanying the sympathetic fibers, and there is no proof that pain fibers are present in the abdominal vagi. This type of pain tends to be an ache or burn, but may be severe and gnawing in nature. It may wax and wane, appear vaguely in the mid-line, and may cause restlessness and sweating. If the stimulus is great, there may be better localization. Usually, though, true visceral pain is

less severe than the referred pain and tends to be overshadowed by the latter. Section of the posterior spinal roots or sympathetics relieves true visceral pain.

Referred pain is that localized in an area other than the one producing it. It is usually localized in the dermatome supplied by the nerves to the organ in question. Unlike true visceral pain, other manifestations such as skin hyperalgesia, muscle guarding, and vasomotor activities may occur. Muscle spasm occurs only with an intact spinal cord, making diagnosis of the acute abdomen in paraplegics difficult.

There has been much work and discussion on the cause of cutaneous pain from visceral lesions. Vasoconstriction is a major factor in blood vessel pain and there are those who feel that reflex vasospasm in the affected area stimulates pain receptors. On the other hand, cutaneous hyperalgesia may be due to the elaboration of a metabolite by the efferent nerves. It is true, though not widely appreciated, that novocain injected locally in the referred area will abolish this pain.

Parietal pain results from contact of the lesion or viscus with the parietal peritoneum. This somatic pain is carried through cerebrospinal nerves and is of great help in localizing the lesion. Somatic pain tends to be late in onset, is steady, boring or knife-like, of great intensity, and results in rebound tenderness and splinting of the trunk.

In 1931 Jones and Pierce passed a balloon down the alimentary tract and inflated it at different levels. This experiment, with information received from animal experimentation and surgical procedures un-

der local anesthesia, have supplied the following information. Pain in the esophagus results from stretching and contraction, ulceration per se being painless. Stomach contractions due to hunger result largely from reduced blood sugar; the chief cause of gastric pain being tension in the wall. The afferent pathway for gastric and intestinal pain is through the splanchnic nerves. Although the vagi do not carry pain impulses, they may transmit stimuli that might result in reflex vomiting.

Small bowel pain is referred generally to the mid-line near the umbilicus and rarely through to the back. Cecal pain is felt at McBurney's point, while hepatic flexure pain is referred to the right upper quadrant. In the ascending, transverse, and descending colons, pain for the most part is felt in the lower abdomen near the mid-line. Recto-sigmoid pain is characteristically felt suprapubic or coccygeal.

The liver parenchyma, serosa and gall bladder, and bile ducts are insensitive to usual stimuli. As in the gastro-intestinal tract, however, pain in the biliary system results from excessive distention or spasm. Passive distention causes a milder, duller type pain. It is possible that pancreatic pain is due to stimulation of pain fibers in the walls of blood vessels. Splenic pain is of somatic origin and depends upon stimulation of the parietal or visceral peritoneum.

A most important factor in the diagnosis is a carefully taken chronological history of events. Allow the patient to tell his own story in his own way. Sick people aren't apt to wander too far afield. Get an accurate description of the beginning of the attack, what came first, and whether it was of sudden onset or gradual in appearance. The character of the pain is suggestive. Is it burning, as with a perforated peptic ulcer, or is it sharp and piercing as with biliary colic? Note its relation to activity, food, or stress, and its present location. Have there been additional complaints? Inquire into recent medication, particularly blood, plasma, steroids, and the anti-hypertensive drugs that may cause intestinal ileus. Pain that has persisted for six to eight hours with vomiting and a rising temperature usually deserves serious consideration as a possible surgical abdomen.

Vomiting is usually present with abdominal pain and may be reflex, local or of cerebral origin. Since the vomiting center is located near the dorsal nucleus of the vagus nerve in the medulla, impulses from the abdomen may spill into the vomiting center. Vomiting usually occurs after pain onset and its character may be of some importance. A great deal of vomitus with a temporary cessation suggests pyloric obstruction, while vomiting is almost a continuous

process with small bowel lesions. Large bowel obstruction is not as prone to produce early vomiting and it tends to be less lavish than small bowel emesis. Reflex vomiting usually ceases soon. Constipation is the rule with inflammatory lesions of the peritoneum. A spreading peritonitis, pelvic abscess, or an injudicious laxative may result in diarrhea. Bloody stools suggest tumor, diverticulitis, ileitis, mesenteric thrombosis, intussusception, or ulcerative colitis.

The examination should be performed in a warm, well lighted room with the patient completely unclothed. A rapid initial examination of general nature is made with considerable emphasis on inspection. Is the patient relaxed or tense? In colicky pain, the patient rolls about, but in pain or peritoneal involvement, the patient lies quietly with the knees drawn up. Note the condition of the skin, whether pale, sallow, sweaty, or dry. What is the condition of the eyes and the tongue? Check the neck for rigidity and nodes, the heart and lungs, blood pressure, and knee jerks. A slowly rising temperature with abdominal pain suggests an intra-abdominal lesion, but a high initial temperature suggests an extra-abdominal lesion. Subnormal temperatures may be associated with shock, hemorrhage, or severe infection.

If abdominal respiration is easy, chances are the pain is not too severe. Blisters of the abdomen or back indicate attempts to relieve pain by hot applications. Look for protrusion of the abdomen, pulsations, the Grey-Turner sign, and the well known but seldom seen Cullen's sign. If scars are present, note their position and condition. Wide scars with prominent suture marks may have been associated with an increase in peritoneal reaction. This may point to peritoneal adhesions.

Palpation should be begun away from the most tender point, using a light touch. A heavy handed examiner soon defeats his purpose. Make it a practice to examine all scars and hernial orifices first. Check the scrotum for testicular abnormalities. It helps if the patient has been seen previously so his reaction to pain can be known. After determining the tenderest point and whether or not rebound tenderness is present, attempt to elicit referred rebound tenderness. When present, this is an excellent way of localizing the lesion. In the frightened, overly tense individual or in one suspected of malingering, the examiner can distract the patient with one hand and palpate with the other. With peritoneal involvement, whether by blood or inflammation, the bowel sounds are diminished to absent. Blood or fluid in the bowel may be heard if the patient is jarred slightly while listening with the stethoscope. Don't neglect the psoas test, the obturator test, and the use of the safety pin in determining skin hyperalgesia. Finally,

the pelvis and rectum should be examined. A dilated rectum suggests the ileus of the bowel while, if contracted, indicates possibly the increased contractility of mechanical obstruction.

After examination, the patient who does not obviously require immediate surgery is then a candidate for further diagnostic studies. Various laboratory procedures including X-ray study may save the patient from an unnecessary laparotomy. At this point peritoneal aspiration has been emphasized by some. It has been used in many doubtful cases and there are few, if any, good contraindications.

Most abdominal pain is caused by abdominal lesions, but there are those subjected to exploratory laparotomy in whom the pain is of parietal origin.

An excellent example of this is segmental neuritis. The pain may be a mild soreness to an intense burning. The Carnett test may help differentiate tenderness in the viscera. When the abdominal walls are tense as when the head is raised, visceral pain is decreased or absent when the abdomen is palpated. Parietal pain may be unchanged or increased. Ordinarily, visceral pain is not associated with a painful dermatome. It is pain of this nature that leads to so many diagnoses of chronic appendicitis. Deep tenderness of the skin, elicited by pressure against muscle or bone, is present in a few patients with segmental neuritis.

Other neurological conditions that might cause some confusion with a surgical abdomen would include spinal cord tumors, diseases of the vertebrae, and tabes dorsalis. The most common of the visceral crises of tabes would be the gastric crisis. This is becoming much less common and with the obvious neurological findings as the absent vibratory senses, ataxia, and pupillary signs, one should be well on guard.

Abdominal Pain in Children

I would like to turn our attention now to abdominal pain in children.

Appendicitis is quite rare during the first year of life, but after the second year it becomes quite common. It is difficult to get a clear history in young children because they cannot be specific as to the location of the pain. Usually the pain is periumbilical in onset and occasionally the classical shift to the right lower quadrant is present. If repeated attacks have occurred, which is unusual, this shift may not be present. In a child the appendix is longer in relation to the abdominal cavity than in the adult. In addition, malrotations are not uncommon. Consequently, the pain of appendicitis may be present most anywhere in the abdomen. Appendiceal pain is ordinarily steady and the patient, appearing ill, lies quietly.

A warm hand left quietly on the abdomen, as Gross emphasizes, will give more information than

a hurried, rough examination. Abdominal spasm due to chest disease will gradually subside, but if the spasm remains, the pain is likely due to an intraperitoneal process. Rebound and referred rebound tenderness are difficult to determine in a child but, if present, are quite significant. The most valuable finding, however, is tenderness, with or without accompanying spasm. It is important to remember that the appendix can be near rupture with minimal, if any, muscle spasm. In addition, pelvic peritonitis from any cause can present without abdominal muscle rigidity.

The differential diagnosis would include the following disorders: Pneumonia which results in a higher fever and white blood cell count, cough, increased respiratory rate, and chest X-ray; pyelitis with its higher fever, tenderness in the flanks, and white blood cells in the urine. Mesenteric adenitis is often confused with appendicitis, but in this condition, muscle spasm is less obvious, nausea and vomiting are not as conspicuous, and fever is low or absent. In my experience, constipation is a most common cause of abdominal pain. Often gas can be palpated in a tender, dilated cecum. When a hard stool is present in the rectum, it is best to examine the child after an enema. Acute gastroenteritis can be a vexing problem, particularly when diarrhea has not yet entered the picture. Occasionally, other members of the family have the same problem, and usually there is little in the way of true muscle spasm. Nausea and vomiting play an important role here and if diarrhea is not present, at least hyperactive bowel sounds are invariably found. In Meckel's diverticulitis there is no shift of pain which hovers about the umbilicus, or just slightly to the left. A most frightening disease seen in young children of usually less than one year is intussusception. The pain is of a recurrent colicky nature with free intervals between. The child screams with agony, pales, becomes sweaty, and rapidly deteriorates. Bloody stools are present in most instances. A mass may be felt in the large majority of cases. It is firm, non-tender, and may harden under the examiner's hand. The right lower quadrant may be empty (Dance's sign) and no peristalsis or gas can be heard or felt here. If there is any doubt as to the diagnosis, a barium enema should be performed.

The periodic syndrome is a waste basket term to include a number of poorly classified disturbances of function in children. One of the most common features is abdominal pain. This pain is difficult to evaluate in the younger child, particularly since the mean age of the child with this problem is six years. Usually the pain is periumbilical and aching or cramping in nature. A characteristic fea-

ABDOMINAL PAIN / Rice

ture is recurrent episodes over a long period of time. Headache, pallor, vomiting, and occasionally visual disturbances accompany this pain.

Another problem of children with abdominal pain is the Cocksackie virus infections or epidemic pleurodynia. This is apparently an extremely common virus, more prevalent between August and October. Although most of the symptoms are respiratory in nature, over one-third have abdominal pain. The pain is in muscle, however, and not viscera, and there may be an elevated temperature out of proportion to the physical findings. About 40 per cent of these children have eosinophilia. One should suspect this condition in a child with abdominal pain, grunting respirations, and dilated ala nasi. If there is any doubt, surgery has not proven to have had a harmful effect on the disease.

One of the most common conditions causing abdominal pain in adults is gall bladder dysfunction. At first, in the milder form, the pain may present in the mid-line of the epigastrium, but as stimuli increase and the pain becomes more severe, it may shift to the right upper quadrant and/or the right subscapular area in the eighth thoracic dermatome. When the peritoneal surface of the lesser omentum in the region of the cystic duct has become involved in an inflammatory process, pain may be felt in the interscapular area of the sixth thoracic dermatome. In five per cent of people, the lesser omentum is supplied with phrenic nerve fibers and pain may then be felt in the right supraclavicular area.

Pancreatic pain occurs in the D10-L2 dermatomes, usually the first lumbar. If the lesion is in the head, the pain is felt in the right paraspinal area, and to the left if the tail is involved. Pancreatic pain may encircle the trunk and when presenting anteriorly is usually just above the umbilicus. This type of pain is agonizing, steady, and is increased by the supine position. This is, of course, characteristic of many retroperitoneal conditions. If acute pancreatic fat necrosis is present, peritoneal involvement may bring in somatic pain to overshadow the visceral pain. The Loewe test has been mentioned as an aid to the diagnosis of acute pancreatitis, but is positive so rarely that it is of little importance.

Abdominal pain in diabetics is not an uncommon finding and a proper decision is often difficult to make. Usually in diabetics with abdominal pain, as opposed to diabetics with an acute abdomen, the vomiting precedes the pain. Hydration and correction of the acidosis usually results in a disappearance of abdominal pain.

The surgeon usually sees the mixed form of acute porphyria, a disease almost exclusively of middle

aged women. There is a long history of abdominal pain and occasionally one or more unsuccessful laparotomies. The abdomen tends to be soft with minimal tenderness and quiet bowel sounds. X-ray films of the abdomen show segmental loops of dilated bowel.

Repeated episodes of abdominal pain in persons with melanin spots of the lips, oral mucosa, face, and digits points to the diagnosis of Peutz-Jeghers syndrome. The pain is generalized, severe, cramping, and unassociated with other gastro-intestinal complaints. More often the patient is of Scandinavian descent with blue eyes and blond hair. The bluish brown to bluish black spots are striking and of the greatest importance in making a diagnosis. In a patient with oral pigmentation, one must also consider plumbism and the possibility of an Addisonian crisis.

Some unusual conditions causing abdominal pain are the colon flexure syndromes, intestinal angina or mesenteric vascular occlusion, the superior mesenteric syndrome, hematoma of the rectus sheath, hyperlipemia, pain from antihypertensives, and sickle cell crises.

Abdominal Pain in the Aged

Patients over 65 comprise about 20 per cent of all patients with acute abdominal pain. The most common causes are (1) gall bladder disease and its complications, (2) strangulated hernia, (3) intestinal obstruction, (4) diverticulitis, (5) appendicitis, and (6) complications of peptic ulceration.

Gallbladder disease in the aged does not appear as striking as in the younger ages. The pain may be more generalized and less severe. Radiation to the scapula is not as characteristic and muscle guarding and fever are not as prominent. Although the patient may not seem as ill as the younger patient, the disease may be more fulminating and rupture of the gallbladder is not uncommon.

The most common causes of intestinal obstruction in the aged are well known. Although distention of the bowel may be tremendous, pain may not be at all severe. The X-ray may be difficult of interpretation and occasionally an emergency barium enema becomes necessary. Diverticulitis is almost always in the sigmoid and deserves its name of left sided appendicitis. The pain, however, may be more near the mid-line and often over the low back. Be suspicious of the diagnosis of appendicitis in the aged. One more often may find a malignancy of the cecum. Less than 10 per cent of acute abdominal pain in the elderly person is due to appendicitis. As in children, however, it is apt to be well advanced.

In diagnostic studies with the elderly, it is quite important to spend some time on the history. Often these people have poor memories and are exhausted

by their illness. Consequently, the story may be grossly inaccurate. The relatives should be questioned but they, too, may give an inaccurate story, since they frequently minimize their old folks' complaints. Since these older people are somewhat more insensitive to pain and relatives have been hearing bowel and bladder complaints for years, they are apt to be unimpressed with the present illness.

For years Dr. Alvarez has been writing on the

subject of small strokes which may cause bizarre symptom complexes. As he has pointed out, abdominal pain is often the first symptom of impending mental depression or psychotic states. Consequently, be on the alert for any little clue that might point to the cerebral cortex as the culprit. Some slurring of speech, a slight droop to the lip or cheek, or weakness in an extremity may save someone from an unnecessary operation.

348 W. Ponce de Leon Ave.

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This recently described manifestation of chicken pox occurs in adults more frequently than is generally believed, and although generally a mild disease, may be severe or fatal.

PRIMARY VARICELLA PNEUMONIA

Kathleen Everitt, M.D., and
Ridley M. Glover, M.D., *Atlanta*

APPROXIMATELY 50 CASES of primary varicella pneumonia have been reported in the literature, most of them (about 45) within the past two years^{1, 2, 3, 4, 5, 6, 7, 8, 9, 10} All cases have been in adults, save for one five year old girl and for several infants with varicella neonatorum or with congenital chicken pox.^{2, 11, 12} Ten cases of chicken pox pneumonia were recognized among thirty cases of adult chicken pox reported recently by Krugman *et al.*¹ Weinstein and Meade in Boston studied 453 cases of chicken pox over a ten year period, 25 per cent of which were adults.⁶ They reported fourteen cases of well documented chicken pox pneumonia—approximately 12 per cent of the adult cases. There were no cases of primary varicella pneumonia in children nor bacterial pneumonia in adults. Thus, although primary varicella pneumonia is extremely rare in children, it is not a rare finding among adults with chicken pox. The apparently increasing frequency with which this disease is being reported probably reflects an increasing awareness of this fact. This report describes two additional cases of primary varicella pneumonia and directs further attention to the prevalence of primary varicella pneumonia in adults.

The most prominent symptom of primary varicella pneumonia is a cough which begins or becomes worse within five days of the appearance of the rash. The cough may be productive of moderate or even large quantities of sputum which is occasionally blood streaked. Pleuritic chest pain and tachypnea are commonly present. Dyspnea, cyano-

sis, fever, chills, and prostration, varying in degree with the severity of the illness, may also be observed.

Physical findings, aside from the extensive skin eruption, which is often hemorrhagic, are generally few. Examination of the lungs usually reveals only scattered rhonchi and wheezing even when respiratory symptoms are severe. Signs of consolidation are present occasionally in the most severe cases. The leukocyte count and differential are usually normal, but a mild leukocytosis has been encountered in some cases. Cultures of sputum usually reveal no predominately pathogenic bacteria. Serologic studies for Streptococcus MG and cold agglutinins are negative.¹

Roentgenographic findings are similar in all reported cases and correlate quite closely with the severity of the skin rash but do not correlate with the severity of the clinical symptoms.⁸ Accentuated bronchovascular markings and small nodular densities of various sizes are seen throughout both lung fields. These lesions have been termed "miliary" by some authors,^{2, 10, 13} but we prefer to use the term "nodular density" or "nodulation"⁵ in order to represent the variation in size more clearly. The nodules are well circumscribed, varying in size from 2-8 mm. in greatest diameter, and are diffusely distributed throughout the lungs. They are heaviest at the hilar region and in some cases coalesce into patches of consolidation.² The hilar regions may become prominent or show a frank nodular enlargement which is thought to be part of generalized lymphoglandular involvement and which is seen to shrink gradually to normal during convalescence.

Serial roentgenographic studies in some

From the Departments of Medicine and Radiology, Emory University School of Medicine, and the Medical Service, Grady Memorial Hospital.

cases,^{2, 8, 9, 10} have demonstrated that lung changes persist from three days² to as long as several months.⁵ Regression is rapid at first and parallels the fading of the skin rash, but later may lag far behind clinical recovery. In one of our two cases the lungs were radiographically clear in nine weeks (Figure 3), but the other showed residual shadows at seven weeks.

The radiographic picture of diffuse, small nodulation of the lungs, when associated with clinical chicken pox, is sufficiently characteristic to warrant a diagnosis of primary varicella pneumonia. However, the differential diagnosis must include a number of other diseases which have, or may have, very similar radiographic manifestations. Among these would be the following: staphylococcal and streptococcal bronchopneumonias, and pneumonias due to measles, ornithosis, and influenza. Tuberculosis, sarcoidosis, and carcinomatosis may also have similar radiographic manifestations.¹⁰ Pulmonary histoplasmosis, blastomycosis, and coccidiomycosis must also be considered.

The two cases of primary varicella pneumonia which are to be reported are among the first to have been recognized at the Grady Memorial Hospital. These patients are husband and wife and are the parents of children who had recently had uncomplicated chicken pox. Their clinical and radiographic findings are consistent with those described above.

Case One

A 33 year old painter developed a mild cough followed later by fever, malaise, and a rash which first appeared on his face and later spread to in-

volve the entire body. Two weeks prior to the onset of his rash three of his five children had had typical chicken pox. Three days after the onset of illness he developed dyspnea, sore throat, and mild pleuritic pain together with an increase in cough and fever. He was admitted to the hospital on the fifth day and was found to have a temperature of 102°, a pulse rate of 120, respirations of 28, and a blood pressure of 110/70. He was moderately dyspneic and slightly cyanotic. The skin showed various stages of typical chicken pox lesions, some with hemorrhagic areas. Scattered rhonchi and musical rales were heard in both lungs. Examination of the abdomen, extremities, and the central nervous system was negative.

Chest X-ray on admission showed diffuse nodular infiltrates throughout both lung fields (Figure 1). Urinalysis was negative. Examination of the blood revealed: hematocrit 43, WBC 8,400 with 29 per cent neutrophils, 67 per cent lymphocytes, and four per cent monocytes.

Treatment was symptomatic only. He became afebrile on the second hospital day and was completely asymptomatic on the third day. Five days after admission (nine days after onset of the rash) chest X-ray showed partial clearing (Figure 2), and complete clearing in nine weeks (Figure 3).

Case Two

A 33 year old housewife developed fever, malaise, sore throat, and had one severe shaking chill approximately two weeks after the onset of her husband's chicken pox. A chest X-ray taken at the onset of her symptoms showed no abnormality. Two days

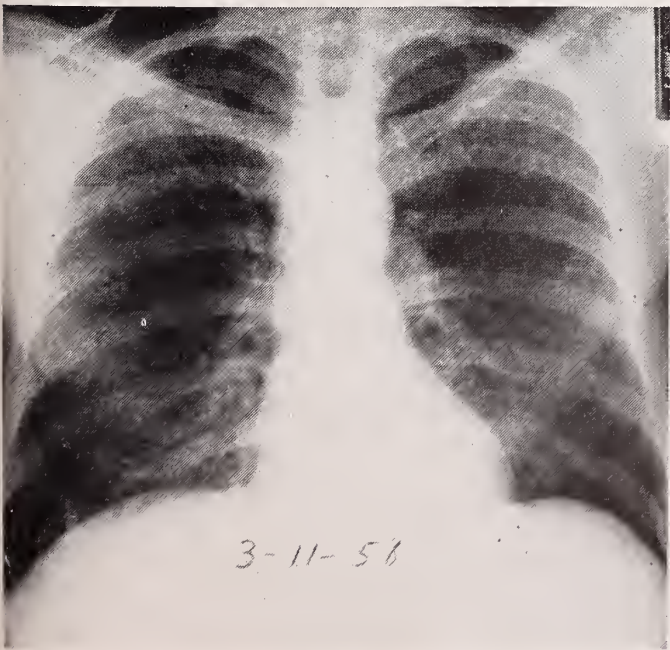


Figure 1: Case 1. Fourth day of rash. Note scattered nodular densities in both lung fields.

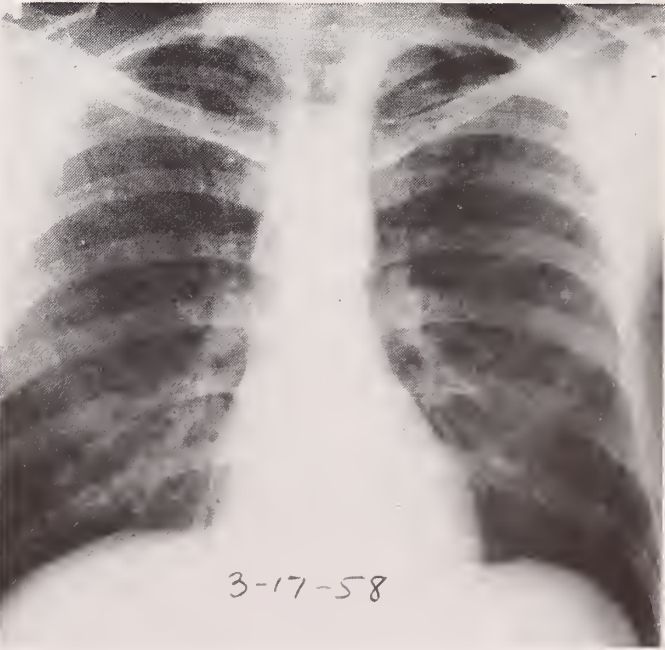


Figure 2: Case 1. Nine days after rash appeared. Note partial clearing.

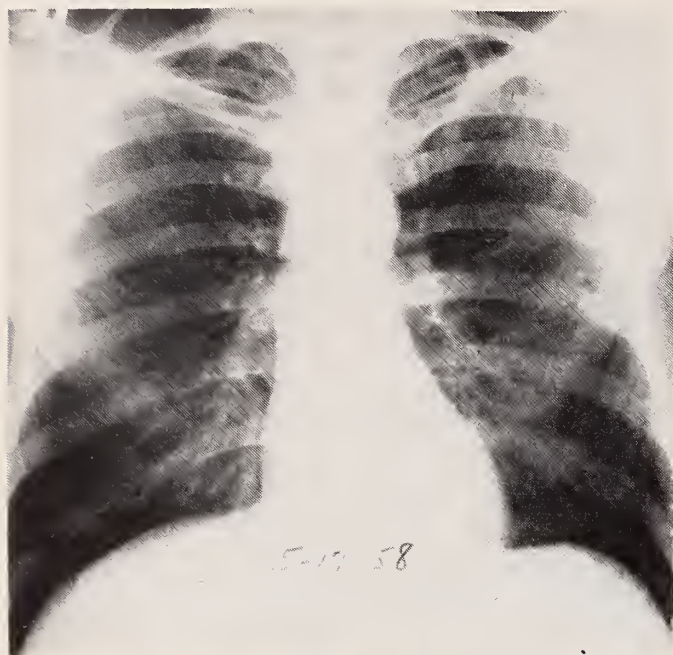


Figure 3: Case 1. Nine weeks after onset of rash. Complete clearing.

later the typical rash of chicken pox erupted. A cough productive of a moderate quantity of greenish sputum, chills, fever, and sweating also appeared. One day after the appearance of the rash she developed mild dyspnea, severe paroxysms of coughing, and was found on physical examination to have a temperature of 103° along with the typical chicken pox eruption. Sibilant rales and rhonchi were heard in both lungs. A chest X-ray showed a few nodular densities scattered throughout both lung fields (Figure 4).

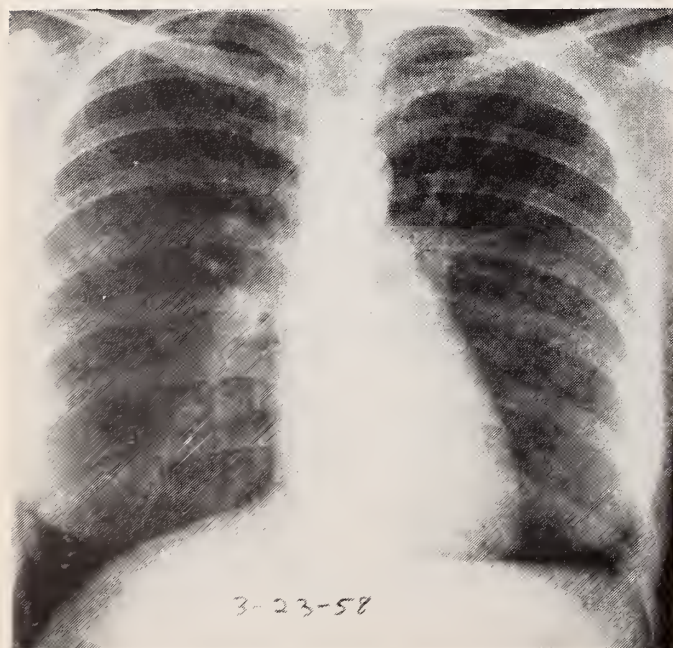


Figure 4: Case 2. One day after rash erupted. Note few scattered nodular densities.

Two days after the onset of respiratory symptoms (fourth day of rash) a repeat chest X-ray (Figure 5) showed an increase in the number and size of the nodular lesions as well as hilar enlargement. At this time she had no remaining respiratory symptoms, but she was admitted to the hospital because of the radiographic evidence of progression of the pulmonary findings. Physical examination revealed a temperature of 99°, pulse rate of 86, respirations of 20, and blood pressure of 105/70. There was a varicella eruption with some hemorrhagic lesions. Sibilant rales and rhonchi were present in both lungs. Urinalysis was negative. Examination of the blood revealed: hematocrit 34, WBC 5,100 with 52 per cent neutrophils, 47 per cent lymphocytes, and one per cent monocytes.

Symptomatic improvement continued after admission and she developed no new skin lesions. She received only supportive therapy. Serial X-rays showed the characteristic rapid clearing during the first twelve days (Figure 6) after peak X-ray findings (Figure 5) followed by slower resolution. At

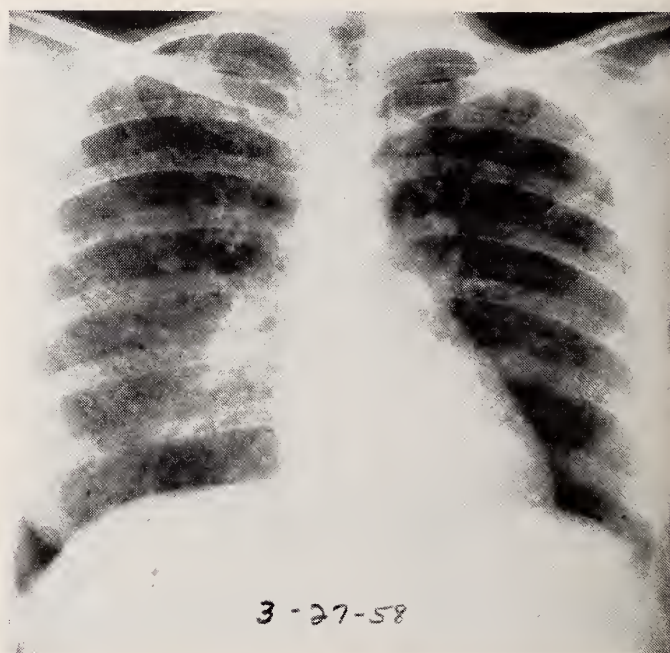


Figure 5: Case 2. Fourth day of rash. Note prominence of right hilum and tendency toward consolidation in that area.

seven weeks a few scattered nodular densities remained.

Discussion

The two cases reported in this paper were both characterized by a severe pruritic, vesicular, and mildly hemorrhagic skin rash, exhibiting successive crops of lesions which covered the entire body. The onset of the husband's illness occurred two weeks after one of his children erupted with chicken pox. Two more of his five children also eventually had mild, uncomplicated chicken pox. In case one (hus-

band) the respiratory symptoms developed two days after the eruption of the skin rash. A chest X-ray taken four days after the eruption (Figure 1) revealed roentgen findings typical of those which have been described in chicken pox pneumonia. Serial X-rays were taken in case two (wife). The first was taken one day prior to the eruption of the rash and revealed no abnormality. One day after the rash, the respiratory symptoms developed and the chest X-ray revealed a small number of nodular densities (Figure 4). New skin lesions continued to appear for four days. The most marked X-ray changes were seen on the fourth day of the rash (Figure 5). Her chest X-ray began to clear after new skin lesions ceased to develop and was almost clear in sixteen days (Figure 6). However, after seven weeks there still remained a few scattered nodular densities.

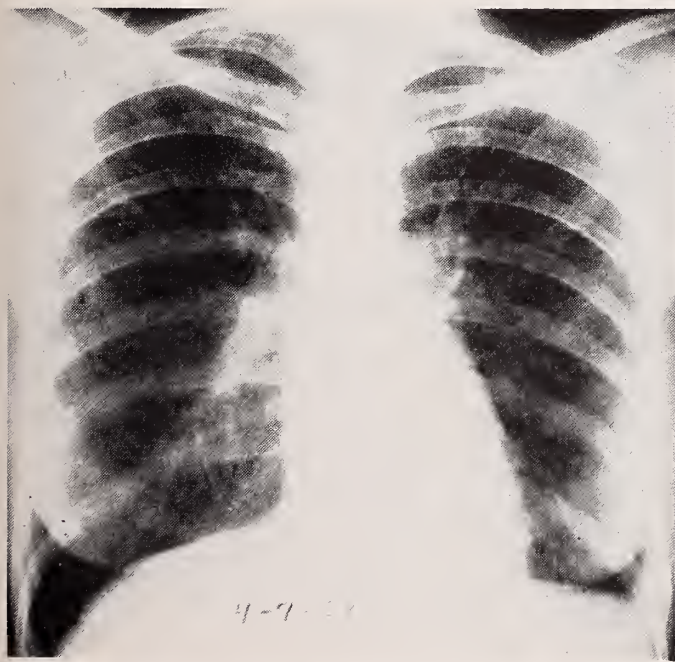


Figure 6: Case 2. Sixteenth day after onset of rash. Almost complete clearing of nodular densities.

Clinically, bronchopneumonia caused by secondary bacterial infection had to be considered in the differential diagnosis. This was ruled out by the following considerations: (1) Bacterial pneumonia usually appears later in the course of chicken pox.⁷ (2) Bacterial pneumonia is rare as a complication of chicken pox in adults.⁶ (3) There was no polymorphonuclear leukocytosis as is usually seen in bacterial pneumonia. Furthermore, the chest X-ray was more consistent with a viral pneumonia than with the patchy, segmental, or lobar infiltration of most bacterial pneumonias. Thus, the diagnosis of chicken pox pneumonia rested upon the typical rash of chicken pox, the characteristic clinical course of the respiratory component of the illness, and the char-

acteristic roentgenographic appearance of the lungs.

Although these two cases were not seriously ill, it should be emphasized that primary varicella pneumonia is a serious and potentially fatal disease. Psychosis, hepatitis, pulmonary edema, encephalitis, and subcutaneous emphysema have been encountered by others.

Autopsy findings reported from fatal cases have been similar. Microscopic findings are chiefly a mononuclear infiltrate which includes small foci of necrosis of alveolar cells and adjacent arterioles, fibrinous exudate in the alveoli, and intranuclear type A inclusion bodies in the septal cells, which are reported to be identical with those reported in the skin lesions.⁷ The pleura is often studded with small nodular lesions. Involvement of other visceral organs and central nervous system may also be found.¹⁴

The treatment of primary varicella pneumonia is entirely symptomatic and expectant. The literature describes no special or specific measures and our two cases received none. However, the hazard of an overwhelming hemorrhagic pneumonitis occurring in the event of unchecked progression was considered and the relative advisability of corticosteroid therapy to forestall such an occurrence was discussed. A decision to withhold corticosteroids was reached and based on the fear that viremia and generalized dissemination might supervene, although we were then and are presently unaware of any published data on the short term use of corticosteroids to control the acute manifestation of chicken pox, or chicken pox pneumonia. This decision to withhold corticosteroids was influenced by the report of Haggerty and Eley¹⁵ who collected information on 12 deaths due to chicken pox which occurred in children who were receiving corticosteroids.

From the reports in the recent literature the conclusion is drawn that in the absence of chemotherapy specific for chicken pox, corticosteroid therapy may be more hazardous in chicken pox pneumonia than is chicken pox pneumonia itself. Consequently, for the present, we feel that corticosteroids should be withheld in chicken pox pneumonia except in circumstances of adrenal cortical insufficiency of such massive pulmonary involvement and rapid progression as to raise the question of survival.

Summary and Conclusions

Two cases of primary varicella pneumonia in adults have been reported. The clinical manifestations and X-ray appearance of primary varicella pneumonia have been reviewed. Serial films of one of these confirmed the impression that chest films may be expected to clear after new skin lesions cease appearing. It is emphasized that primary varicella pneumonia, although rare in children, does occur in adults more frequently than is generally believed,

VARICELLA PNEUMONIA / Everitt, Glover

and although generally a mild disease (as in the two cases reported herein), may be severe or fatal. The possible role of corticosteroid hormone substances in therapy is discussed and considered to be an unwarranted hazard except in the gravely ill.

Grady Memorial Hospital

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HOSPITAL CARE FOR THE INDIGENT PROGRAM

FOR A NUMBER of years the need of state assistance in the area of hospital care for the indigent has been under study and discussion by many organizations in Georgia. The 1957 session of the Georgia General Assembly passed Act. No. 397, Georgia Laws, 1957 which authorized the creation of a Hospital Care for the Indigent Program within the State Department of Public Health.

On April 10, 1958 the State Board of Health gave final approval to the rules and regulations of this new program. With this approval, the program is ready to operate as soon as funds are made available. Formal endorsement of the regulations has been given by the Medical Association of Georgia, and the Hospital Care Advisory Council established by the Act. The County Commissioners Association of Georgia, Georgia Hospital Association, and Association of Hospital Governing Boards have played active roles in the formulation of the program by being represented on the Hospital Care Advisory Council.

The purpose of the program is "to assist counties in the purchase of hospital care for persons who are ill or injured, and who can be helped by treatment in a hospital, and are financially unable to meet the full cost of hospital care from their own resources or from the resources of those upon whom they are legally dependent." The program should not be construed as replacing existing federal, state,

or local hospital and medical care programs for the indigent but may supplement such programs. It is to be a state-county jointly financed approach and within the framework of sound managerial techniques, maximum local administration is encouraged.

This new program will be voluntary. Counties are to make their own decision as to whether they will participate. This will be indicated by a letter or resolution from the county governing authority expressing the desire to participate in the program. Later, each participating county will enter into a contract agreement with the Georgia Department of Public Health. Among other things, the contract will stipulate that the County Board of Health, or other agency acceptable to the Georgia Department of Public Health and the county, will be the local administering agency. The responsible administering agency may, however, delegate definable aspects of the program to other official agencies.

State funds, when available, will be allotted to continue on the basis of population and median income. Counties having a low median income will receive a larger per capita share of state funds than those having a higher median income. The matching of county funds will vary in accordance with population, ranging from 75 per cent in counties with populations of 5,000 and under, to 30 per cent in counties having over 100,000 population. This

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ATOMIC MEDICINE —

THE USE OF RADIOACTIVE ISOTOPES IN MEDICINE AND IN SURGERY

J. R. MAXFIELD, JR., M.D.,* *Dallas, Texas*

I AM INDEED happy that the Jonte Equen Memorial Lectureship invited me to speak on this important subject and I hope that many of you will find applications in your daily endeavors where our friend, the atom, can help you in many important ways.

Since atomic energy is a universal product, it now behooves us to become acquainted with the atom's impact on medicine and meet this basic scientific development face to face. The physician's prime responsibility to his patient, to himself, and to his staff is to protect against the ever increasing problem of radiation.

We must utilize atomic knowledge in its application to medicine by stressing the great value of radiological procedures to the public. It is necessary to reassure patients that competent medical radiology is safe. The use of radioisotopes, X-ray diagnosis, and X-ray therapy to diagnose disease more accurately and to treat it more effectively is necessary. We must meet the challenge of ability to use the great advances made in this sphere of medicine in an intelligent manner by continuing to eliminate needless examinations, but by insisting on the ones that present vital information.

We must understand and evaluate the radiation hazards and feel the responsibility to demand the strictest adherence to rigid safety practices. We must minimize the slightest radiation exposure to prevent injury to workers and constantly check radiation equipment and supplies. We must continue safe atomic industrial medicine. We must allay the false fears regarding atomic radiation. We must aid in combating the problems resulting from the increased use of radiation. We must consider the health of the

worker and the general public, those subject to daily exposure and to accidental exposure and waste disposal. We must read available reports by recognized authorities on the specific radiation "know how" (AEC indorsed preferred).

We must advise and assist in atomic legislation. We must take an active part individually and through our professional groups in all proposed regulatory and control functions on all levels of government. It is the physician's responsibility to be actively concerned with local, state, and federal legislative regulations, particularly those that are vital to the medical profession and its patients. The physician must be prepared to meet emergencies. He must be conversant with atomic disaster medical aid and participate in the Civil Defense Program. Emergencies involving atomic energy disaster will make supreme demands on all physicians.

How did we get to our position of today? What has been our past? What is our objective?

Since the beginning of time man has struggled for solution to his many problems and a means of ridding his environment of many sufferings. The atom may well be the solution. The medical and biological fields are feeling the fullest effect of atomic knowledge with great emphasis being placed upon treatment and research. There are nearly 2,000 medical organizations and private physicians utilizing radioactive materials in study of disease and in treatment where other means have been inadequate. Such fields as the diagnosis and treatment of thyroid diseases, the determination of the how, when, and why of many complex biological processes in the human body are but a few of the many fascinating procedures which are now available. Tracer methods promise new knowledge into the behavior of all the elements. Research into unknown facets of nature, further information as to growth and even life itself

*Radiologist, Maxfield Clinic-Hospital. Texas Radiation and Tumor Institute. Regional Advisory Council on Nuclear Energy.

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are leading us down a broadening highway toward longer and more useful life.

The partnership between the atom and the medical field has been in existence for a number of years, first on a very limited basis and more recently on a broader, more open basis, for all to behold.

Progress in Medicine

Let us reminisce a bit about the great progress that has been made in medicine and see if we can trace the impact of the atom on our profession. From the earliest times we have had the problem of disease and the physicians in the early Greek and Roman empires were attending to disease in a most skillful manner. The operative descriptions of Hippocrates challenge even the skills of our competent surgeons of the past century. Certainly with the co-operation which was shown in the learned professions of the early Greeks, we can see the value of adequate understanding and co-operation between our modern physicians.

The development of methods of treatment of disease and the knowledge of drugs to relieve pain and alleviate human suffering are recorded throughout the annals of our early medical history. It was as civilization progressed then receded into the dark ages that there was also a growth and recession in the science and art of medicine. We have been able to find in our written records the great advances in the schools of medicine in the Roman empire under Galen. It was during this period that a sound foundation was put under medicine and experimental procedures advanced the knowledge and concepts of a far reaching nature. Mankind was benefited. During the dark ages the science of medicine was almost lost. The renaissance period saw certain dogmas evaporate and the subsequent disagreement and dissatisfaction with current information of the time led to a new search for the truth. In this development there were many points of knowledge which are recorded in our history, but which did not, in themselves, improve or augment the actual care of the sick or treatment of disease. The great French surgeon, Ambroise Pare, did much to add character and respect to the faltering surgery of his day. Even with the contemporary work of the great Belgian anatomist, Vesalius, he could not truly improve the general practice of medicine or surgery of his time, although the concepts of many of these great men are basic and essential to our present state of advancement in medicine. I am pointing to some of these important applications so that you may gain insight into the future and know that medicine in its infancy was able to provide man with methods of doing things

somewhat better, but in which the general progress could not be sufficiently broadened to be widely felt.

Such discoveries as the circulation of blood by William Harvey in the 17th century and the genius of Pasteur in his origination of the present concept of bacteriology, coupled with the ability of John Lister to apply this to surgical procedures added only to safety but little to the scope of extending our ability to diagnose disease and alleviate suffering.

In your own great state of Georgia, one Crawford Long gave ether to the world to abolish the pain of operation. This was a tremendous step to progress in medicine and surgery, but again we find that we were limited in our ability to treat disease by our inability to diagnose it. We were still limited to the skills of the eyes, the ears, the hands, and the nose for observation, palpation, and the investigation of accessible areas. Still held in the great unknown, within the living, were the changes taking place in the lungs, the heart, the stomach, the intestines, the kidneys, etc. It was extremely difficult, if not impossible, to understand and diagnose adequately so that definitive treatment could be carried out on those diseases affecting internal organs.

The role of the atom now comes into the field of medicine and begins to shape our future. Toward the end of the 19th century such scientists as Becquerel, Crooks, and others were paving the way to utilization of knowledge that was to materially change all our lives. When Roentgen discovered the existence of X-ray in one of his experiments in the latter part of 1895, a new era opened in the field of medicine. Here, for the first time, was a means, in the living, of determining what was happening deep in the body. With the use of opaque materials, which were rapidly to follow, it was possible to diagnose accurately and, therefore, definitively treat internal disease processes. This truly is a stage in which the development of surgery pushed ahead tremendously. Cooperative efforts of the radiologists and surgeons were to have a profound impact upon our entire civilization. The scientists in providing better instruments with which to work, the radiologists in applying these, the surgeons in carrying out the more intricate procedures for removal, repair, and replacement, the pathologists and physiologists in better understanding of the body functions, the pharmacologists and the chemists in supplying better drugs have allowed the practice of medicine to push forward, and the treatment of disease to be more effective. Life expectancy has been increased to the point where we are approaching the three score years and ten. Never before in the history of man has such great progress been made as during the half century from the time of the discovery of X-ray.

We must look again over our progress and realize

that with advance comes certain restrictions and disadvantages. We can see that we have a new and exciting age in which the imagination can run rampant, bringing us an unlimited vision into the sort of world ahead that can fulfill our concept of Utopia, which we may be destined to reach. There are mounting problems, however, which may lead us to use this new found power and strength in a way that we may bring about our own destruction.

I think we can all realize that it is a small price to pay for possible mutations which our biologists and geneticists tell us may possibly develop from the effects of radiation or the advent of increase in diseases in the field of leukemia or so-called radiation-induced diseases, if we can see that the total effect on our population will be so small as to be relatively insignificant. We can look around and see immediately that the control of diseases such as tuberculosis, pneumonia, heart trouble, and many others, the lengthening of the life span, early diagnosis, and proper treatment have come about in large measure by the use of our great diagnostic tools in the field of radiant energy. This is being further augmented by the use of radiation tracers at the present stage of development. The 25 years which has been added to life expectancy since 1900 speaks loudly for progress which has been made in the field of medicine and public health and much of this is traced back directly to the effect of the field of radiology on the practice of medicine.

You have only to think a moment to know that the miracles of present day surgery are dependent almost entirely on the findings of radiological procedure. What could be done in our spectacular cardiovascular surgery without the aid of the diagnostic acumen of the radiologist? This does not belittle the extreme dexterity and ability of our competent surgeons, our trained anesthesiologists, and our physiologists who have developed the many companion instruments and techniques. The basic hub of the forward roll toward a more picturesque speech must be built around the radiologist. Certainly with the various specialities in the field of medicine co-operating as is possible today, the future is almost unlimited.

Applications of Nuclear Medicine

Since my time is short I must restrict myself to the task of leaving with you some basic and usable concepts of the application of atomic medicine in everyday practice.

It is impossible to discuss more than briefly the many applications of nuclear medicine, but specific information is available to those who can be stimulated by this discussion to desire to proceed beyond the realm of the embryo isotopologist. The scientific papers which have been written on the use of radio-

active materials and diagnostic procedures are literally in the thousands. If I can point out to you the usefulness of these methods of radioisotope tracer techniques and the therapy as it applies to everyday medicine, I shall feel my effort has been rewarded.

Diagnostic Uses

Radioactive iodine, I_{131} , is the most widely used and perhaps best known of the materials for tracer techniques. The selective uptake in the thyroid gland can be utilized for determining the uptake and retention of the isotope and, thereby, indicating the biological state of thyroid function. Distributed within the thyroid gland, the material can be utilized to outline specific areas of function or nonfunction so that thyroid response can be adequately identified. Further information will be discussed relative to treatment with radioactive iodine later.

In addition to utilization of the radioactive iodine as a soluble iodine form, it is used for other tests by attaching it to a molecule such as is present in RISA (radioactive iodine serum albumin). After this has been done, the material can be utilized to locate malignant lesions within the brain since there is predilection for the retention of the RISA within the tumor bearing area. Due to impairment of the blood brain barrier, substances such as this will accumulate in the extracellular spaces and cells of the tumor. The site and extent of a tumor not detected by other means can frequently be detected in this way. This is accomplished with no discomfort or injury to the patient.

The utilization of RISA has been popular for determination of plasma and blood volume. This method of determining fluid states has allowed transfusions to be given based on blood volume studies. Reduction of mortality rates has been significant, since this technique permits following rapid changes in the circulating blood volume. It is extremely important, particularly in the aged individual, to know fluid balance and to be able to replace plasma losses or red cell mass by appropriate measures. This technique is now possible and, unfortunately, too few surgeons and anesthesiologists are familiar with these modern isotopic techniques. The combination of radioactive phosphorus, radioactive chromium, and radioactive iodine in determining blood volumes and circulation data can be utilized in various combinations for the information desired. The amount of RISA for such determinations is completely safe even for many repeat examinations.

The utilization of Rose Bengal tagged with radioactive iodine in liver function has been a profitable study. Rose Bengal is rapidly picked up by the polygonal cells of the liver. The rate of deposition and the excretion is indicative of functional capacity. It can also be utilized as a means of detecting non-

functioning areas and thereby presumably tumefaction in the liver.

The new techniques using radioactive iodine in Diodrast has been developed in which kidney function can be quantitatively determined. This augments the conventional radiological procedures of urinary excretion tests.

The Radioactive Iodotriolein has given considerable information on pancreatic function.

Radioactive chromium is another material which has great usefulness. It can be used effectively for the determination of the red cell mass. The ease and accuracy of the "rachromate" method suggests better control of patients during major surgery by the competent anesthetist. The radioactive chromium for the determination of the survival time is a simple and practical test which has been made routine in many hospitals. The utilization of this in determining the survival of transfusions in patients with chronic anemias or those having radiation therapy has merit. Rachromate has been utilized for plasma tagging and determination of plasma and blood volume. The use of these procedures is readily evident.

Radioactive cyanocobalamin, (radioactive cobalt labeled vitamin B₁₂) is coming to the forefront as a method of importance and accuracy in the clinical test for pernicious anemia. The test is extremely satisfactory, is safe, simple, and can be utilized on a patient who has had previous therapy if he is removed from all therapy for only a few days.

Radioactive phosphorus has been successfully used as a diagnostic procedure for identification of malignant tumors of the breast. This was first utilized for breast tumors only, and was later extended to evaluate the axillary masses. It was then adapted for utilization in detection of brain tumors, and more recently for the diagnosis of tumors of the eye. It has been quite successfully used in this procedure. The radioactive phosphorus has been used for determination of red cell mass and for circulation studies. Utilization of radioactive phosphorus for determination of the extent of malignant tumors in the bowel and thereby delineating the line of surgical excision has been satisfactory and stimulating. The use of the radioactive phosphorus plus testosterone has been informative as to extent and concentration of radioactive material in metastatic tumors from the prostate and breast and to bone.

Radioactive sulfur is used for the study of metabolism of the amino acids in the body. S³⁵ is incorporated in Methionine, glutathione, and cystine, which are the essential building blocks for tissue formation. It is possible to determine the uptake of

amino acids in various organs by this method. The difference in uptake and their utilization in diseases such as cancer, cirrhosis, diabetes, and vitamin deficiencies can be studied.

Radioactive sodium 22 and 24 are used for studying sodium turnover in the body. One can tell the rate of sodium transfer through blood vessel walls. It has been determined that there is a fast turnover to tissue fluids and to sweat, a medium turnover to fluids of the eye, the brain, the spinal cord, and a slow turnover to the bones and teeth. Radioactive sodium is also used for detecting normal and restricted blood circulation. The method is quick, gives no discomfort to the patient, and an accurate pattern of blood flow can be determined.

Radioactive iron is utilized in the study of whole blood preservation and for the function of blood circulation time. This can also be used to determine the life span of transfused blood cells. The study of the use of iron in the body indicates that the turnover of iron is small. The iron is stored mostly in the liver and spleen, and the red blood cells are supplied by the iron from the old cells which have disintegrated. By using a directional scintillating counter radioactive iron in the spleen can be followed. Determination of the turnover rate in the spleen can be measured. In polycythemia there is a very rapid input of radioactive iron and a relatively rapid output. In refractory anemias the spleen destroys the red cells at an abnormal rate, while the normal subject shows balanced production and destruction. This test is also useful in determining the prognosis of the polycythemic patient.

Before we turn our eyes to therapeutic activities using nuclear medicine, let us remember that this field is relatively young. An astounding growth has taken place in the few short years of its existence. Greater possibilities are already on the horizon.

Therapeutic Uses

Who can tell but what the future may bring to this exciting field more and even better methods of diagnosis with possibly a scientific break-through tomorrow, which may play a great part in our further goal of the control of disease?

The therapeutic use of radioactive iodine in the treatment of hyperthyroidism in its various stages has received the most favorable comment. The total number of patients having been successfully treated numbers in the thousands. The effectiveness of the treatment is limited only by the ability of the isotopologist. The fears once held as to possible hazards from I₁₃₁ are apparently without foundation. There has been no report of malignant change occurring as a result of radioiodine therapy, nor is there likely to be any significant incidence of such.

The utilization of other methods of treatment

certainly holds more hazards than does the use of radioactive iodine. There is definite mortality and certain morbidity from the surgical procedures even in the most capable hands. There is effect from the long administration of a toxic agent such as Propylthiouracil and other antithyroid drugs which have been documented. Actual deaths have already been reported. Severe hematological changes are not unusual in such administrations. There have been no serious complications reported from I_{131} .

The advantages of treatment of hyperthyroidism with I_{131} are: (1) The physician is better able to control the degree of abolition of the thyroid gland. (2) The complications associated with other methods of treatment may be eliminated. (3) There is no mortality. (4) Discomfort and inconvenience to the patient are minimal. (5) Exophthalmos is less frequent and better controlled. (6) The cost is less. (7) The end results are more permanent and better than by other methods of treatment.

While there is some evidence to indicate difference of opinion in certain phases of the treatment of hyperthyroidism with radioactive iodine, there seems to be a unity of opinion that all post-operative recurrent hyperthyroidism should be treated with radioactive iodine. There is a reasonably uniform opinion that the diffuse thyrotoxic in the older age group should be treated. There is hesitancy in some Institutions in treating the younger patients with radioactive iodine, but I believe this is not a valid contention.

The toxic nodular goiter lends itself well to treatment with radioactive iodine, provided the dosages are increased above what is used for the diffuse toxic gland, provided, also, that the patient is followed and at the time a new euthyroid state is established any remaining firm nodules be removed surgically. This simplifies the surgical procedure and gives the patient a more effective control of the hyperthyroidism, with a minimum of loss of time from activities or occupation.

It is felt by most investigators that the progressive exophthalmos should be vigorously treated. To this can be added the use of post-orbital pituitary irradiation.

A high percentage of the patients with angina and those with cardiac failure show worthwhile improvement after reduction of thyroid function by radioactive iodine. This is particularly true in those patients who are mildly hyperthyroid or upper normal thyroid when treatment is started. The paroxysmal tachycardia treated with radioactive iodine shows a dramatic reduction in the number of paroxysms and can usually be controlled satisfactorily by this method. The palliative control of chronic pulmonary insufficiency may return a pulmonary cripple

to a reasonably active life by the reduction of CO_2 which must be eliminated through the handicapped lungs.

In Parkinson's disease the treatment with I_{131} results in considerable improvement in about half of the patients.

In all the above type cases the procedure can be assumed to be completely reversible since it is always possible to administer thyroid extract to return patients to the level of thyroid function which was maintained before the radioactive iodine therapy. There should, therefore, be no permanent complications of hypothyroidism by this procedure.

In the treatment of cancer of the thyroid the utilization of radioactive iodine depends upon the ability of the metastases to pick up the radioactive material. Various methods of stimulation of the metastases by total thyroidectomy, use of thyroid stimulating hormones, the use of antithyroid drugs, etc. have been carried out to sensitize the metastases to the uptake of the radioactive material. The success by stimulation has been rather disappointing, but in a few instances significant improvement has been attained by repeated small doses of radioactive iodine where the uptake in the metastases itself was small. There is also the plan of carrying the patient on adequate dosages of thyroid extract once complete abolition of the thyroid has been carried out, and then at intervals of four to six months allowing the withdrawal completely of the thyroid extract and repeated tracer uptakes and therapeutic procedures.

Radioactive phosphorus was the first artificially prepared radioisotope to be used therapeutically. Its early use was in the treatment of polycythemia vera and the chronic leukemias. It has maintained superiority in these fields, being used widely by practitioners for the control of these conditions. The therapy of phosphorus has been extended by the use of treatment of metastatic lesions in the bone by combination of testosterone plus radioactive phosphorus. By this method the concentration of the radioactive material into the metastasis can be accomplished to the degree that therapeutic effects are obtained with inhibition or destruction of the tumor and reparative changes occur in the bony structures. The effect in soft tissue metastatic lesions by radioactive phosphorus administration for therapy are gravely discouraging.

The use of chromic phosphate (P^{32}) as a method of injection intravenously in the patients with leukemia and certain of the lymphoblastomas has met with considerable success. Chromic phosphate injection into carcinoma of the prostate and into the pituitary region for destruction locally of these tissues has been found to produce the desired effect in many

cases. Chromic phosphate injection into the pleural and abdominal spaces for ascites is also useful and reasonably easy to accomplish.

The use of phosphorus in plaques to treat localized skin malignancy or keratoses or the injection of the material directly subcutaneously in these instances causes destruction of the tumor with a minimal degree of scarring and at minimal patient discomfort.

Further use of radioactive phosphorus has been devised by injection of the material in multiple small doses intravenously to patients who have malignancy of the breast. This is at the time of the original surgery so that the possibility of neoplastic spread of general systemic growth can be minimized. While the results are such that statistics cannot be obtained, they are stimulating and continue to be encouraging.

Strontium 90 has been utilized as a beta ray source for the treatment of pterygi around the eye and for the treatment of keratoses, small birthmarks, or early, shallow, superficial squamous cell carcinomas, particularly around the face. This has the advantage of giving a minimal amount of scarring and an ease of application of the treatment.

The use of Strontium is also of value in the treatment of the superficial tumors in the conjunctiva and the eyelid, anterior segment tuberculosis, and vascularizations which occur around the cornea and in corneal scars or ulcers.

Radioactive gold falls into the class of material in which great hope has been expressed and in which some definitive treatment has been devised. The use of the injection of radioactive gold into the prostate in the colloid form has been and is being used. The results of treatment are most encouraging with a number of patients getting excellent long survivals and without evidence of tumor growth.

The utilization of radioactive gold into the chest and abdomen for metastatic malignant changes with fluid formation has long been established and is an effective method of treatment, the only disadvantage being one in which it is slightly more costly than the chemotherapeutic agents or chromic phosphate and that the gamma rays make it a bit more difficult to handle.

We believe the use of radioactive gold in the abdominal cavity should be done only after pneumoperitoneum has been carried out for evaluation of adhesions to know that the fluid has free access within the abdominal cavity.

The prophylactic use of radioactive gold after surgery for carcinoma of the ovary is gaining support in most centers. The evidence indicates con-

siderable decrease in the incidence of recurrent tumor by peritoneal implant or in the local site.

Significant remissions have been obtained by the use of radioactive gold intravenously in certain of the leukemias and in the lymphoma group, since the radioactive colloid deposits selectively in the reticulo-endothelial system.

The use of radioactive cobalt in the form of small cobalt sources within nylon tubing or in hollow stainless steel needles has been used extensively in our hospital and elsewhere. This procedure gives the ability to deliver a predetermined site in the wall of the bladder a dosage of 7,000 gamma roentgens or more with a minimal amount of exposure to the opposite side of the bladder. This results in a more excellent recovery following the internal irradiation of a portion of the urinary bladder and usually results in salvage of the kidney on the involved side if the ureter has been obstructed by tumor at the ureteral orifice. Utilization of the cobalt and nylon sutures for carcinoma of the cervix with lateral extension and for squamous cell metastasis involving the nodes in the patient's neck has been successful. Utilization of the material sewed into the tonsil area can also be done with minimal effort and good results.

The use of radioactive cobalt sources to replace radium in the cervical applicators is gaining popularity in this country. It certainly has many advantages, and the cost is much less than radium. Economic factors make it readily available throughout the country to all qualified users.

The use of telecobalt therapy machines is becoming more popular, with increasing numbers of these located throughout the country.

The radioactive telecobalt therapy machine has advantages in treatment. There are practically no side effects from the usual treatments. Larger concentrations of the dosage can be made in deep seated neoplasm with minimum skin changes. These units are proving to be a further step in our fight against malignant disease.

The Atomic Age Horizon

On tomorrow's horizons we see in medicine more knowledge in the problems of life itself, precision identification, and correction of disease by the use of new radioactive tracers and more scientific diagnostic aids. We will find greater certainties and advanced knowledge of unprecedented scope in the field of treatment. Better techniques will be perfected. Better equipment will be designed to attain a high degree of medical control of cancer, the aging

process, and the crippling and disabling metabolic diseases.

In agriculture we should find a possible solution of the world's food uncertainty. The millennium may well be reached in the world food supply by wider knowledge into the secrets of plant life. The atomic age will inevitably develop into greater abundance, richer soil productivity, preservation of our resources, and advances in food storage to the point that no refrigeration will be necessary.

In industry we will have product improvement through radiation devices. Atom smashing will produce new basic and synthetic materials. Consumer costs will be greatly reduced by manufacturing efficiency through a quality control by radiation, which will mean accurate gaging and material testings and better component identification. There should be minimized employee accident and health losses. There will be unlimited nuclear power to operate

machinery at maximum efficiency, thereby rechanneling our fossil fuel into more valuable uses due to their chemical derivatives in the petrol chemical industry.

This gives you a view of nuclear medicine that can be utilized in your daily practice. I have made no attempt to specify techniques or to assign credit for development, since this is presented on a broad concept of the growing importance of this field of medicine. It is an attempt to stimulate the interest in applications for the benefit of the patients and the physicians.

The medical profession in this new atomic age will be expected to play a top role in the drama of life itself for the protection and preservation of all mankind. Will you prepare yourself now to accept the challenge through continuing study and creative thinking?

Maxfield Clinic

THE NATIONAL FOUNDATION

THE NATIONAL FOUNDATION for Infantile Paralysis has dropped the reference to a specific disease in its title and will be known in the future as The National Foundation. They plan an expanded program that will permit a scientific assault on major health problems of the nation.

Projected plans center on the development of an organized voluntary force in the fields of medical research, patient care, and professional education, flexible enough to meet new health problems as they arise, with specific goals initially.

The heart of the new program is research. This research will not be confined to a single disease but will attack at least five areas. All five areas of the expanded program will be financed through the traditional March of Dimes conducted annually in January.

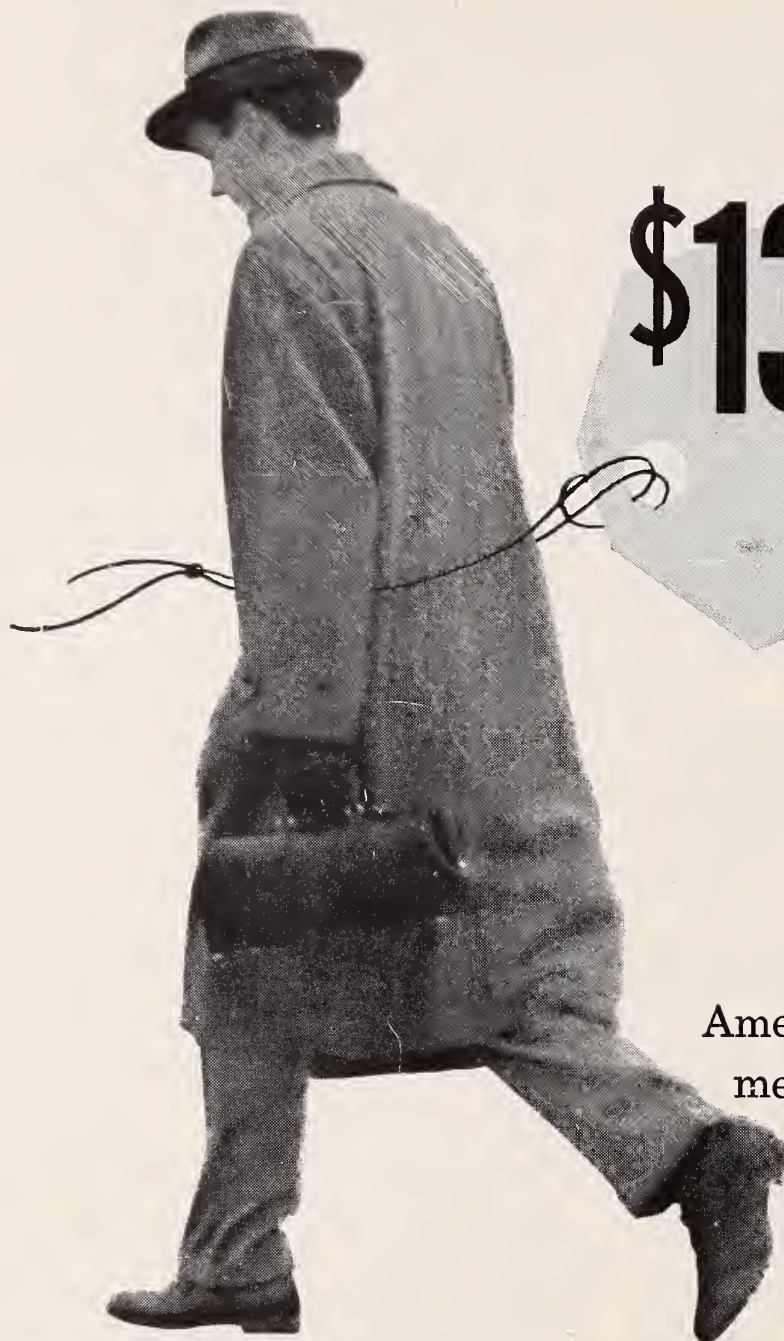
Basil O'Connor, President of the organization, said that The National Foundation would carry on its winning fight against polio. Its history-making virus research program will be continued as will the investigations currently being conducted into disorders of the central nervous system. The new goals will be research and, in the very near future, a

patient aid program in arthritis and congenital malformations.

Mr. O'Connor made it clear that the enlarged program, while a natural outgrowth of work done in the course of finding a polio preventive and caring for polio victims, is a beginning program only and that The National Foundation — by contributing its 20 years of broad experience in the field of health to the solution of other perplexing diseases of mankind — hopes to shorten the period within which these diseases may be solved.

Mr. O'Connor stressed that no attempt will be made to duplicate the work of other voluntary agencies, although as scientific breakthroughs occur they will be pursued wherever they lead, with the general objective of improvement of man's health.

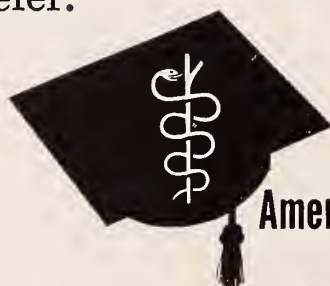
The new program was adopted after five years of unprecedented investigation of areas of need in the health field and careful assessment of the strengths of The National Foundation that could be applied to other problems. Conferences were held with medical, civic, and governmental leaders, as well as representatives of National Foundation chapters from all regions of the country.



\$13,356

America's
medical schools graduated
6,135 new doctors
of medicine last year.
It cost \$13,356
to train each of them.

Most of this becomes medical school operating deficit which we as a profession must help meet. We will send your contribution along to the medical school of your choice if you prefer.



American Medical Education Foundation

535 North Dearborn Street, Chicago 10

TENTATIVE PROGRAM

1959 MAG Augusta Annual Session Section and Joint Section Meetings

SUNDAY AFTERNOON, MAY 17, 2:00 P.M. TO 5:00 P.M.

Radiology, Orthopedics, and Psychiatry-Neurology-Neurosurgery
Pediatrics, Anesthesiology, and EENT
Georgia Society of Dermatology Business Meeting

SUNDAY EVENING, MAY 17, 8:15 P.M.

General Session (G. P. Night Program)

MONDAY MORNING, MAY 18, 9:00 A.M. TO 12:00 NOON

General Session (G. P. Day)
Georgia Radiological Society Business Meeting and Film Reading

MONDAY AFTERNOON, MAY 18, 2:30 P.M. TO 5:00 P.M.

Surgery, Industrial Surgery, Anesthesiology, Urology, and
Orthopedics
Medicine, Diabetes, Dermatology, and Chest
Radiology

MONDAY EVENING, MAY 18

Alumni Dinners

TUESDAY MORNING, MAY 19, 9:00 A.M. TO 12:00 NOON

Medicine, Diabetes, Dermatology, Chest, and Pathology
Surgery
Pediatrics and General Practice

TUESDAY AFTERNOON, MAY 19, 2:30 P.M. TO 5:00 P.M.

Obstetrics & Gynecology and General Practice
Pathology

TUESDAY EVENING, MAY 19

President's Banquet

The Achievements of Arist

...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only $\frac{2}{3}$ that of prednisone¹... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*²...absence of serious side effects specifically noted.^{1, 2, 3}

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients⁴... 6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).⁵

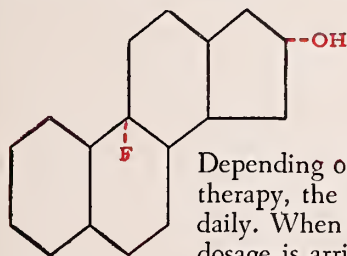
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13. Dubois, E. L.: Personal Communication.

ARISTOCORT®

Triamcinolone LEDERLE

...in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.⁶... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.⁷

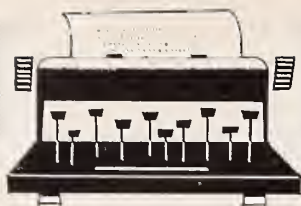
...in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.^{8,9}... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.^{10,11,12}... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.¹³



Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about $\frac{1}{3}$ in rheumatoid arthritis, by $\frac{1}{3}$ in allergic rhinitis and bronchial asthma, and by $\frac{1}{3}$ to $\frac{1}{2}$ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.



editorials

ETHICS

ETHICS HAS BEEN DEFINED by Webster as "the science of moral values and duties; the study of the ideal human character; moral principles, qualities, or practice." For some, ethics exists only as a word found in the dictionary. Fortunately, these men are few in number but their lack of moral values produces a stain that besmirches those with whom they work and paints an indelible stain upon the escutcheon of the medical profession.

Several thousand years ago the oath of Hypocrates was formulated to express those principles of ethics by which all physicians should be bound. Many times during the countless decades that followed, men have tried to improve upon this simple paragraph of the ancient Greek physician. Try as they might, however, none have been able to achieve the simplicity, yet completeness, of this Hypocratic oath. After many years, the American Medical Association's long and involved "Code of Ethics" was completely revised and instead of a set of positive rules of conduct we now have a series of "principles" by which a physician may judge the propriety of his conduct with his patient, colleagues, and the public. These principles as promulgated by the American Medical Association in no way improve upon the Hypocratic oath. They merely spell out in more detail a guide of conduct.

The ethics of a physician may be likened to the effect of a stone cast into the center of a quiet pond. Ripples spring from the center and spread in ever widening circles back to the water's edge. The smallest circle, closest to the center, could well represent the doctor's family, closest to his heart, and bound to be swayed by his character and principles. The next ripple may well be his office, and its smoothness will reflect the harmony and good influence that exist within this circle. Beyond these, ever-widening circles may represent the relationship of the physician to his colleagues; to his hospital and those

who serve him there; beyond this to his professional society; and still further to the community in which he lives. The moral principles and character of a physician progress ever outward from the physician himself, affecting those around him in proportion to their nearness, but, nevertheless, always having some effect, even as do the ripples reaching to the furthest-most edges of the pond.

A few months ago we were unfortunate enough to lose a physician whose great character and principles had nothing but a salutary affect upon all with whom he came in contact, no matter how remotely. Dr. Hal M. Davison was very much interested in the problem of ethics and the physician. Shortly before his death he undertook to write an article explaining the various paragraphs of the revised Code of Ethics of the American Medical Association. His interpretation was presented to the senior medical students both at Emory and the Medical College of Georgia. Dr. Davison's presentation was received as one of the most interesting of a series. It is published in this issue of the *Journal* so that all may read and benefit.

*Christopher J. McLoughlin, M.D.
Atlanta*

WATER, ELECTROLYTES AND LIVER DISEASE

DISTURBANCES IN BODY ELECTROLYTES and fluid balance occur with characteristic patterns in diseases of the liver; knowledge of these shifts promotes understanding of various clinical manifestations and a logical therapeutic approach.

Viral Hepatitis

Water retention occurs in the acute stages of hepatitis, particularly when there is associated ascites; during the recovery period compensatory diuresis occurs.¹ The mechanism, while debatable, may be the result of parenchymal failure to inactivate antidiuretic hormone. Although sodium is likewise retained, serum electrolyte concentrations are not significantly altered except in fulminant cases so that fluid and electrolyte balance are not common therapeutic problems. If vomiting is severe and protracted, some replacement therapy may be indicated.

Cirrhosis without Ascites

Sodium and fluid retention with increases in total body water may also be demonstrated in pre-ascitic cirrhosis. The mechanism is apparently increased renal tubular resorption of sodium and water in response to some stimulus other than posterior

pituitary anti-diuretic hormone.⁵ The problem is of small magnitude unless hemodilution is sufficient to result in secondary hyponatremia with clinical manifestations of weakness, hypotension, and azotemia. Diminishing urinary output and falling hematocrit herald this situation and treatment with fluid restriction prophylactically or combined with hypertonic saline once the syndrome has developed may give gratifying results.³ Hypokalemia is frequent in cirrhosis and probably accounts for much of the observed gaseous distention and muscular weakness. The causes are multiple and include poor food intake, vomiting, diarrhea, negative nitrogen balance associated with hepatocellular failure, losses with mercurial diuresis, an intracellular potassium shift during therapy with intravenous glucose.^{2,5} The inclusion of potassium in diet or infusions is important in the therapeutic regimen.

Cirrhosis with Ascites

Sodium and fluid retention appear prominent among the various factors thought to be involved in the etiology of cirrhotic ascites. The regularity with which experimental ligation of hepatic veins produces ascites preceded by a dramatic fall in sodium and water excretion, and the consistency with which fibrosis and regenerating parenchymal nodules diminish the size of the hepatic venous bed would appear to support this contention. Increased activity of adrenal mineralocorticoids seems to be the ultimate mechanism. Sodium restriction is indeed primary in the treatment of ascites and may prevent or control the problem. Depressed serum sodium concentrations in the un-tapped ascitic cirrhotic usually do not represent quantitative salt depletion and rarely produce symptoms or require treatment. Following paracentesis, however, fluids and electrolytes may occasionally pour into the peritoneal cavity, shrinking plasma volume and resulting in marked thirst or circulatory collapse; subsequent ingestion or infusion of sodium-free fluid leads to hemodilution and acute symptomatic hyponatremia. Maintenance of serum osmotic pressure with salt-poor albumin may prevent this uncommon complication; hypertonic saline infusion is required once it has developed.⁵ As with non-ascitic cirrhosis, potassium depletion and its accompanying manifestations are frequent and replacement desirable and necessary.

Liver Failure and Hepatic Coma

Hyponatremia and fluid intolerance become more acute with this grave complication; marked pre-existing electrolyte imbalance may indeed be a factor in promoting hepatic coma. Careful patient observation for clinical evidence of sodium and potassium deficiency and fluid intake-output recording is mandatory. If serum electrolyte determina-

tions are available, they are of great value in guiding therapy. Potassium supplementation prophylactically and in the face of deficiency is of utmost importance because of the role of intracellular potassium in protein synthesis.⁴ Serum sodium concentrations also appear to have some prognostic value and levels below 120-125 mEq/L are rarely, if ever, associated with recovery, even in the face of energetic replacement.

Hepato-renal Syndrome

Renal failure resembling acute toxic nephrosis not infrequently accompanies profound liver damage from any cause, and adds its own effect on fluid output and electrolyte alteration. The end result in an individual patient is the product of interplay between these two factors. Clinically, diminishing urinary output occurs with resultant uremia. Fluid intake must become sharply curtailed because of water intolerance in the face of oliguria, relative and absolute hyponatremia are frequent, and potassium levels may either continue low or rise secondary to impaired renal excretion. Co-existent hyponatremia accentuates the effects of hyperkalemia. If sodium replacement, dietary potassium restriction, and exchange resins are ineffective in controlling the abnormalities, intravenous glucose and insulin may be of temporary benefit in depressing serum potassium levels, but the quantity of fluid permissible is small, and little gain is to be expected in the face of continued renal insult.

*Victor A. Moore, M.D., Department of Medicine,
Medical College of Georgia, Augusta.*

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COMMITTEE CHAIRMAN VISITATION PROGRAM

SO THAT ALL Medical Association of Georgia Committees may be assured of close liaison and cooperation with the Headquarters Office staff, a Committee Chairman Visitation Program was instituted last month. Council, cognizant of the fact that committee work is the "life blood" of Association activity, requested staff personnel to visit each committee chairman during the months of August and September. The purpose of these visits is to coordinate the programs and projects of the Association's 40 com-

mittees, aid the committee chairmen, and report to Council on committee progress.

Approximately 20 of the 40 committee chairmen have been visited and the results are gratifying. The majority of these committees are active—they have met or will soon meet again to consider the problems of the profession. Committee chairmen, acting as the “spark plug” of committee machinery, have the responsibility of assessing the projects referred to their respective committees. The chairman is also responsible for seeing that an agenda for committee meetings is prepared and sent to members of the committee in advance of meetings convened by the chairman.

Committee meetings are held to plan policy and action on the projects of the committee. The committee then makes a recommendation to Council and, if approved, it becomes the committee responsibility to implement the project and “get it on the road.” Some recent committee projects of note that have been successfully accomplished are: medical school course for senior medical students titled “The Art of the Practice of Medicine” given at both Georgia

medical schools; a weekly health column titled “Doc MAG Says” on medical subjects now running weekly in over 100 Georgia weekly newspapers; a maternal and infant welfare study of maternal deaths in Georgia; a code of cooperation between the MAG and the Georgia Bar Association; and many other tangible efforts in the public interest by the profession.

As the Association is midway in the year 1958-59, most of the committee work should be underway. While medical committee activity lags during the summer vacation months, five committee meetings are scheduled in September and that many more have been slated for October and November. From all indications the “state of the MAG” appears to be active and vigorous if judged by committee activity for 1958-59.

It is well for the majority of the profession to recognize their collective debt to these committees which undertake the burdens of the whole profession. They serve—they care—and a word of praise to these physicians who spend their time going about their committee tasks would not be unwelcomed. Trite but true is the phrase, “so few serve so many,” and recognition of these few is in order for their unceasing efforts to do a job.

GEORGIA HEART CLINICS TOUR

THE GEORGIA HEART ASSOCIATION successfully concluded its 1958 Clinic Tour with a luncheon meeting of the Committee on Cardiovascular Clinics in Macon on August 10th to determine methods of improving services for indigent patients.

Findings were evaluated and recommendations considered from eight of the 16 heart clinics in the GHA's statewide system during the Macon meeting. Dr. William B. Fackler, Jr., LaGrange, is chairman of this committee.

The past GHA tour included those clinics geographically located in the northern half of the state. The remaining clinics in the southern sector will comprise the 1959 tour. The statewide tour was divided to allow for increased participation by physicians.

Those clinics under Georgia Heart Association sponsorship visited on the four-day tour were Giddings Memorial Clinic, St. Joseph Infirmary, Atlanta; Atlanta Cardiac Clinic, Grady Memorial Hospital, Atlanta; Aidmore-CCD Cardiac Clinic and Emory Catheter Lab, Emory University; Dalton Heart Clinic, Hamilton Memorial Hospital, Dalton;

Gainesville Heart Clinic, Hall County Health Center, Gainesville; Athens Heart Clinic, Michael Memorial Clinic Building, Athens; Augusta Heart Clinic; Talmadge Memorial Hospital, Augusta; and Macon Heart Clinic, City Hospital, Macon.

Topics brought under discussion at each clinic included consultation programs, attendance, records and reports, facilities and equipment, and services available to the clinic system.

Professional education was emphasized through the proposed establishment of a Rheumatic Fever Case Register and discussion of the present Rheumatic Fever Prophylaxis program, and recommendations from the Society of Radiologists concerning extensive use of Fluoroscopy. The role of Public Health Nurses in follow-up programs was also considered.

The Georgia Heart Clinic System has received national recognition and is considered a model for other states to follow. It is the only such program in Georgia organized on a state-wide basis to provide diagnosis and treatment for all indigent patients regardless of the area in which they live.

LABOR HAS PROBLEMS, TOO EX-UNION MAN SAYS

ON OCCASIONS COMMITTEE Chairmen, Association Officers, or headquarters staff personnel have told me how discouraged they sometimes get trying to preserve the private practice of medicine in the face of threatening government intervention, third party mechanisms, and apathy within our own ranks.

It is perhaps encouraging to note that organized labor has some of the same problems. In a recent article in *Harper's Magazine*, a former union staff man complains of the lack of interest of local union leaders in political matters. The typical reaction this union man got after delivering a pep talk to a local union was: "If you guys aren't after us for one thing, it's another — you must think we got nothing to do after eight hours in the plant but take care of your pet ideas."

The article also points out that policy resolutions of the AFL-CIO are ground out by staff members and that "less than one per cent — if any — of the resolutions adopted by the conventions originate in local union meetings."

Thank goodness we have preserved our policies of local determination whereby recommendations and programs originate with the county society and work up through the state society to the AMA. Anyone attending the AMA House of Delegates can see this process in action. MAG sponsored three resolutions at the San Francisco meeting in June.

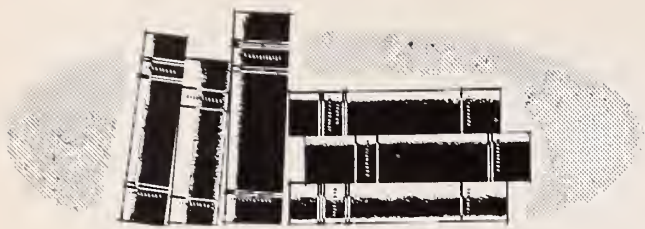
All of this is by way of saying we have a well established system of organization where the physician on the local level has the first and last say so. We must continue to preserve not only the private practice of medicine but also our "states rights" and our "county rights." Only in this way can we effectively serve the public and the profession on the local, state, and national levels.



Lee Howard, Sr., Savannah

Lee Howard, M.D.

President, Medical Association of Georgia



physician's bookshelf

BOOKS RECEIVED

Simpson, Keith, M.D., **FORENSIC MEDICINE**, The Williams Wilkins Company, Baltimore, 1958, 353 pp., \$7.00.

Lown, Bernard, M.D., and Harold D. Levine, M.D., **ATRIAL ARRHYTHMIAS, DIGITALIS AND POTASSIUM**, Landsberger Medical Books, Inc., New York, 1958, 222 pp., \$6.90.

Hollender, Marc, H., M.D., **THE PSYCHOLOGY OF MEDICAL PRACTICE**, W. B. Saunders Company, Philadelphia, 1958, 276 pp.

Dolger, Henry, M.D., and Bernard Seeman, **HOW TO LIVE WITH DIABETES**, W. W. Norton & Company, Inc., New York, 1958, 192 pp., \$3.50.

Augustin G. Rudd, **BENDING THE TWIG**, American Book-Stratford Press, Inc., New York, 1957, 292 pp., \$3.95.

Harrison, T. R. (Editor), **PRINCIPLES OF INTERNAL MEDICINE**, McGraw-Hill Book Company, New York, 1958, 1782 pp.

REVIEWS

Rosen, George, M.D., **A HISTORY OF PUBLIC HEALTH**, MD Publications, Inc., New York (June) 1958, 495 pp., \$5.75.

A HISTORY OF PUBLIC HEALTH is a comprehensive account of the historical development of the whole field of public health philosophy and practice. It tells the story of public health from its beginnings in the earliest civilizations to its present state of development among the economically and technologically advanced nations of the world.

Communities have always had to contend with health problems which arise as a result of people living together in groups. Such problems include the provision of food and water, the control of communicable diseases, the maintenance of a sanitary environment, and many others. The solutions to those problems require community action and, as a result, there has developed what we know today as public health.

In telling the story of public health, this book is concerned with two components, one of which is the development of medical science and technology. Understanding the nature and cause of disease provides a basis for preventive action. However, the effective application of such knowledge depends on a variety of nonscientific elements including economic, political, and social factors. Essentially, the book is a social history

in which public health may be seen to develop in a background of ideas and events.

The book was designed to be read by interested laymen as well as professional health workers.

T. F. Sellers, Sr., M.D.

Perry, Eldon T., M.D., **THE HUMAN EAR CANAL**, Charles C. Thomas, Springfield, Illinois, 1957, 116 pp., \$4.75.

EVERY MEDICAL DOCTOR should read this 100 page monograph on the human ear canal. Dr. Perry is seeing the external ear through the eyes of a competent and discerning dermatologist, rather than through the usual E.N.T. approach. Even the experienced otologist will find nuggets of wisdom and will relish this review of the last literature and credit Dr. Perry with the original contributions on this subject. The subject is carried interestingly, efficiently, and quickly through nine chapters. For those attempting laboriously to search this subject in the Archives, he has given a splendid "out," for he has condensed this book to about one hour of study.

In the first five chapters the gross and microscopic anatomy, physiology, microbiology in health and disease, and facts concerning cerumen are beautifully presented. The last four chapters cover the clinical pictures of external otitis, the diagnostic approach to and the treatment of external otitis in its many variables. Since otitis externa is especially prevalent this time of year (80 per cent of ear patients), this book is most timely.

James M. Hicks, M.D.

Welch, C. Stuart, M.S., M.D., Ph.D., and Powers, Samuel R., Jr., A.B., M.D., M.Sc.D., **THE ESSENCE OF SURGERY**, W. B. Saunders Company, Philadelphia, 1958, 297 pp.

THE ESSENCE OF SURGERY is a fairly small book of 297 pages, and it is divided into twelve chapters. The book begins with a history of surgery, and it is brought out that although surgery is old in time, by far the greatest development has taken place within the last century.

Surgery is presented as a separate disciple of Medicine, and the authors bring out the fact that although the dictionaries define surgery as an act or practice of healing by manual or instrumental operation, surgery today is certainly not that. It is the preparation of the patient for surgery, the operative procedure, the immediate post-operative period, as well as the rehabilitation.

Present day surgery has profited considerably by the new knowledge of physiology of the body. Much of this knowledge is in the field of chemistry. The authors divide the operative surgery into the treatment of wounds, extirpative surgery, physiologic surgery, and reconstructive surgery.

The phenomenon of bodily injury is any action detrimental to the human body, and the discussion's theme is that surgery is basically concerned in the problem of acute injury. They discuss the power of resistance the body has to injury and how the body attempts to compensate for an injury that takes place.

The authors discuss healing by first intention, second intention, the healing of special tissues, and the contamination of wounds due to loss of body tissues.

The fifth chapter deals with the loss of body fluids. The authors have simplified this about as much as this complex problem can be simplified with all its ramifica-

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

tions. This is a very excellent chapter. The factors and the treatment of shock are discussed.

Infection is covered, and the authors bring out the fact that we have to consider the manners of getting infection and certain bacterial resistance to antibiotic treatment. Infection is divided into different body cavities, such as peritoneum, chest, etc., as well as conduits such as bile ducts, liver, kidneys, and ureters.

The seventh chapter deals with the principles of pre-operative and post-operative care, resuscitation, and particularly do they cover shock and hemorrhage, along with pulmonary complications that take place following surgery.

The eighth chapter deals with the essentials of surgical technique, particularly asepsis, hemostasis, and proper dissection. They bring out that intelligence and discrimination have to be used to the highest extent.

Extirpative surgery which deals with benign disease and malignant disease is covered very briefly. The authors emphasize the fact that planning is a very important phase in elective reconstructive surgery. You have to make the exact diagnosis as well as the tissue loss. Then you have to consider primarily how you are going to restore the best functional results, and secondarily, the appearance.

There is one particular chart which I feel is worth the price of the book. This is concerning reconstructive surgery and is about the control of hemorrhage by artery ligation for certain anatomic regions. It gives the location of the hemorrhage and the first choice of artery to ligate and the second choice of artery to ligate. The first choice ligations are safer selections in that permanent ischemia does not follow their interruption. The area which the authors give as second choice ligation carries higher morbidity and often results in serious ischemia. Also, it is sometimes desirable to diminish the active circulation by temporary occlusion of the major artery. In that manner prohibitive blood loss can be avoided and the operative time can be shortened. Also, the operative field can be kept relatively free of annoying bleeding so that the operation can be more perfectly performed. There is a table demonstrating which arterial occlusions are of value in various resections. They give the area to be resected and where to place the permanent ligation as well as where to place the temporary occlusion. Not only do the authors discuss blood vessel ligations, but they give the various types of blood vessel anastomosis, their techniques, and the various prostheses.

Another chapter deals with the physiology of surgery. The authors have a chart which gives the operation, disease, and physiological effect that can be obtained from such operative procedures. They discuss the physiologic effect upon the patient from operations such as lumbar sympathectomy, shunts, oophorectomy, etc.

The last chapter deals with anesthesia, and as we well know, this cannot be divorced from surgery because the two are so interwoven that any discussion of surgery should include anesthesia.

To me this book is certainly a well worthwhile addition to the library of any individual who does surgery, but it is by no means a reference book. It is very concise, easy reading. The authors have emphasized the fact that surgery is a "changing science" and very different from what it originally was years ago, and that

a surgeon is more than just "an operator." Surgery is a science of treating the patient from the time that he seeks a surgeon's advice until he is restored to society.

Milford B. Hatcher, M.D.

Wilson, J. Walter, M.D., CLINICAL AND IMMUNOLOGIC ASPECTS OF FUNGOUS DISEASE, Charles C. Thomas, Springfield, Illinois, 1957, 280 pp.

THIS VOLUME is a readable, stimulating, and accurate presentation of selected aspects of medical mycology. Its greatest appeal should be to the individual whose prime concern is with the patient rather than with the causative organism. This is not to imply an indifference on the part of the author for basic mycological and serological problems; on the contrary, the author seeks, when possible, to relate the mycotic diseases to over-all considerations of host-parasite interaction in infectious disease in general. The major emphasis of the book is on the systemic mycoses, and the author has drawn extensively on his firsthand experience with Coccidioidomycosis to develop the basic concepts which carry over to the consideration of the fungous diseases. Of special medical interest is his exposition of the benign, primary, cutaneous syndrome following cutaneous inoculation, with Coccidioidomycosis, Sporotrichosis, Histoplasmosis, and North American Blastomycosis all sharing a common "chancriform syndrome." Therapy is handled succinctly, although regrettably the volume went to press before the encouraging results with amphotericin B (Fungazone) in such entities as Histoplasmosis and Cryptococcosis were discovered. In view of the increasing importance of Candidiasis as an iatrogenic infection, it might have been accorded more extensive coverage. Similarly, some consideration of Mucormycosis and Aspergillosis would have been welcomed. The clinician should find this volume most helpful toward a broader perspective on the fungous diseases of man.

Morris Tager, M.D.

Cecil, Russell L., M.D., and Conn, Howard F., M.D., THE SPECIALTIES IN GENERAL PRACTICE, W. B. Saunders Company, Philadelphia, Pa., 1958.

THIS VOLUME, edited by Russell L. Cecil and Howard F. Conn, is divided into fourteen chapters. Each chapter is authored by a well known man of his speciality, and an attempt has been made to present in an easily read, concise manner most of those things that make up General Practice. The volume covers "Minor Surgery;" "Orthopedic Surgery;" "Fractures and Dislocations;" "Urology;" "Diseases of the Anus, Rectum, and Colon;" "Gynecology;" "Obstetrics;" "Pediatrics;" "Ophthalmology;" "Disease of the Nose and Throat;" "Diseases of the Larynx, Bronchi, and Esophagus;" "Otology;" "Dermatology and Syphilology;" and "Psychiatry." Each chapter contains its own bibliography at the end of the article.

"Minor Surgery" gives rules for preoperative medication, analgesia and anaesthesia, and post operative management. It then makes mention of certain congenital anomalies such as pilonidal cysts, and covers trauma and burns excellently. Even the surgical treatment of tattoo marks, ingrown toenails, and corns are covered. Also, infections such as carbuncles and tenosynovitis are delt with.

"Orthopedic Surgery" deals mainly with the various

BOOK REVIEWS / Continued

congenital abnormalities of the skeletal system, advances to abnormalities of growth following infections such as polio and tuberculosis, then deals with arthritis. This chapter is mainly of interest as a reference and a refresher to explain just what can be done for the patient and the family.

"Fractures and Dislocations" is an excellent chapter. Particularly interesting is the way the author deals with fractures of the ankle and of the knee.

The author of the section on "Urology" deals with a difficult subject as best he can. Other than treating an early cystopyelitis, most of these patients must be placed in the hands of the Urologist for a complete urinary investigation.

The author in "Diseases of the Anus, Rectum, and Colon" emphasises a good ano-rectal examination. In his opinion, each G. P. should familiarize himself with the proctoscope and sigmoidoscope. The common things such as hemorrhoids, fissures, rectal abscess, and anal skin tags are given adequate attention. He mentions amebiasis and other infections. Treatments are recommended.

The two sections of "Gynecology" and "Obstetrics" are well written and cover just about any complaint that will bring the woman to the physician. Especially well written is the portion concerning abnormalities of pregnancy.

"Pediatrics" concerns itself mainly with care of the newborn, both full term and premature. It covers feeding requirements and schedules then progresses into vitamin deficiencies, pancreatic fibrosis, malformations, constipation, vomiting, and diarrhea. Malformations, eczema, and immunization are covered with care.

Not often in a book for general practice does one find the thoughtful preparation and subjects covered in the sections of "Ophthalmology;" "Disease of the Nose and Throat;" "Otology;" "Diseases of the Larynx, Bronchi, and Esophagus." The authors have mentioned almost everything that the G. P. treats during his practice. In addition, they bring attention to the importance of glaucoma, its detection and treatment; as well as cancer.

The sections of "Dermatology and Syphilology;" and "Psychiatry" are packed with a ready reference of diagnosis and treatment for most common types.

It is believed that this book finds a needed place on the shelf of every busy G. P. The style of writing makes for easy reading. There are no boring tables of statistics, nor varying opinions of laboratory results in animals. It will help many times in the run of the day to clarify, treat, and to diagnose.

A. L. Morris, M.D.

Martin, Gustav J., Sc.D. (Editor), **CLINICAL ENZYMOLOGY**, Little, Brown & Company, Boston, 1958, 230 pp., \$6.00.

AS THE TITLE indicates, this interesting and informative book deals with theories and dynamics of enzymes, yet covers their application in medicine. The first three chapters cover a background of concepts about enzymes; namely, the structures, both micro and macro, spatial arrangements, modes of action, inhibitors, chemical and physical chemical factors of identity, activities, pH

optima, kinetics, and the specific action of selected enzymes. Many will find these chapters advanced in mathematical and theoretical treatment. Information on preparation and purification of selected enzymes would be desirable. Following is the "Parenteral Use of Enzymes in Medicine" and "Diagnostic Uses of Enzymes." Where the various specific enzymes are related to disease entities they are well documented, both pro and con, but specific pharmacological information would be of value. Next, the "Polymerases in Biology" are discussed then followed by a recapitulation.

Proteolytic enzymes are covered more thoroughly than the others in all phases of the work cited. This may be a necessity as the preponderance of work has been done with these enzymes.

This book points up the need for greater research in both diagnostic and clinical enzymology; it should prove helpful to anyone engaged in enzymology with clinical applications.

William S. Harms, Ph.D.

Wolstenholme, G. E. W., M.D., and O'Connor, Maeve, B.A., (Editors), **CHEMISTRY AND BIOLOGY MUCOPOLYSACCHARIDES**, Little, Brown & Company, Boston, Mass., 313 pp., \$8.50.

THE CIBA FOUNDATION Symposia have become famous for their excellent and timely presentations of the status of important problems in medicine, biology, and biochemistry. This volume maintains the high standard of its predecessors, both in the quality of the papers presented and in the vigor and penetration of the discussions. For the purposes of the Symposium a wide choice of topics was made, ranging over the whole field of the complex macromolecules containing carbohydrate and often associated with protein. The Symposium begins with a presentation of the general chemistry of the mucopolysaccharides (M. Stacey), a discussion of the physical chemistry of hyaluronic acids (B. S. Blumberg and A. G. Ogston), and a description of an ingenious immunochemical approach to mucopolysaccharide structure (E. A. Kabat). The role of uridine nucleotides in mucopolysaccharide biosynthesis is discussed by A. Dorfman and J. A. Cifonelli. After this introduction, the topics range widely over the mucopolysaccharides of cartilage and connective tissue, milk, Gram-negative bacteria, epithelial mucus, plasma, and urine. The nature of these substances associated with blood group specificity is discussed by W. T. J. Morgan, and the blood group active substances of plant origin are discussed by G. F. Springer. R. Meier presents a fascinating account of the pharmacological properties of polysaccharides, in relation especially to their role in the inflammatory process, in resistance to bacterial and viral infection, in allergic phenomena, and in metabolism. Another aspect of these substances, in relation to the influenza virus, is discussed by Gottschalk. Finally, there is an excellent paper by E. Klenk on neuraminic acid and its derivatives, the sialic acids, which are found more and more to play a critical role in the biological reactions of the complex polysaccharides. From the Symposium it is clear that a most helpful start toward the understanding of the mucopolysaccharides and mucoproteins has been made, and it is also evident that these substances are of the greatest importance because of their direct and intimate association with fundamental processes in tissues both in health and disease.

Jane A. Russell, Ph.D.

cancer page



MAG - ACS

Liaison Called Excellent

Enoch Callaway, M.D. LaGrange

Chairman, Professional Education Committee, Georgia Division A.C.S.

AT THE ANNUAL meeting of The Medical Association of Georgia in Macon last April, Reference Committee Number Five recommended acceptance of the Committee on Cancer and approved a statement which said:

"We recommend to the Executive Officers of the Medical Association of Georgia that the Officers of The Georgia Division of The American Cancer Society be requested to establish closer liaison with the Council of The Medical Association of Georgia in regard to the professional education and teaching program."

After an exchange of letters, representatives of the Georgia Division, A.C.S. met with the Council of the Medical Association of Georgia on July 13, 1958.

The Council came to the conclusion and passed a motion that it found the liaison between the Medical Association of Georgia and the American Cancer Society to be excellent. Council also approved and commended the activities of the Professional Education Committee. It was further moved and passed that since the Reference Committee and some others did not know how satisfactory this liaison was, that the manner of maintaining liaison be published in *The Journal of the Medical Association of Georgia*.

The Secretary of the Medical Association of Georgia and the Chairman of the Professional Education Committee of the American Cancer Society were

authorized to draw up a proper statement and to have this statement published in the *Journal*.

The Georgia Division of the American Cancer Society has at all times attempted to maintain this close liaison by having a large number of the members of the Cancer Committee of the Medical Association of Georgia on its Executive Committee, on its Board of Directors, and on its Professional Education Committee. At present, all medical members of the Finance Committee of the Georgia Division are members of the MAG Cancer Committee. Of the nineteen members of the Cancer Committee of MAG, thirteen are Directors of the Georgia Division. Eight are members of the Executive Committee of the Board of the Georgia Division. Nine of the fourteen members of the Professional Education Committee of the Georgia Division of the American Cancer Society are also members of the Medical Association of Georgia Cancer Committee. The other members are ex-officio members due to their positions with the Board of Health and The Academy of General Practice.

Members of the Medical Association of Georgia's Cancer Committee have at all times (and at present) constituted a majority of the medical members of the Georgia Division of the American Cancer Society's Board, Executive Committee, and Professional Educational Committee. In this manner we believe that an almost perfect system of liaison is maintained between the two organizations.

Published by Request of Council of the Medical Association of Georgia



abstracts by georgia authors

Brody, Jacob A.; Helen Moore; and Elizabeth O. King, M.S., Communicable Disease Center, Public Health Service, Department of Health, Education, and Welfare, Atlanta, Georgia, "Meningitis Caused by an Unclassified Gram-Negative Bacterium in Newborn Infants," *J. Dis. Children* 96:1-5 (July) 58.

Outbreaks of meningitis caused by a previously undescribed gram negative organism have occurred in hospital nurseries in Greenville, South Carolina and Portsmouth, Virginia during the past two years. This organism which has not yet been successfully classified has also been isolated in Florida, Massachusetts, Pennsylvania, North Carolina, and Georgia. Of the 19 cases in the two outbreaks, 17 were in premature infants. Sixteen became ill between the fifth and ninth day of life. The clinical course was characteristic for bacterial meningitis in this age group, with a few infants succumbing early of sepsis and several progressing to hydrocephalus. Sixteen of the cases died. Age, sex, weight and condition at birth, treatment, and medication were not found to be predisposing factors. A gram negative bacillus was recovered from the spinal fluid on 17 occasions. Seven cultures which were available for study contained a long, pleomorphic, non-motile organism, not fastidious in growth requirements which is oxidase positive, a weak indole producer and will ferment certain carbohydrates after a week. It is highly resistant to antimicrobial agents. The bacillus has been recovered from the throats of healthy infants in the nurseries but, thus far, never from adults or the physical environment. Although the definitive epidemiology has not been worked out, there is the strong suggestion that this

represents a new form of hospital infection.

Galambos, John T. and Richard G. Cornell, Ph.D., 36 Butler Street, S.E., Atlanta 3, Georgia, "The Diurnal Variation of Urinary Coproporphyrin (UCP) Excretion in Health and Disease," *Am. J. Med. Sciences* 235: 532-538 (May) 1958.

The day and night 12-hour urinary coproporphyrin (UCP) excretion was determined in 129 urine specimens from nine normal persons and on 99 urine specimens from eight hospitalized patients with acute or chronic illnesses. The coefficient of variation (C.V.) of the 12-hour urines was clearly lower for the healthy than for the sick group. This indicates that the variation of 12-hour UCP excretion is more marked in ill patients.

Variation of UCP excretion was studied in 104 consecutive four-hour urine specimens from nine healthy persons and on 94 specimens from ten ill patients. The coefficient of variation (C.V.) was consistently and distinctly lower in the healthy group.

The variation of the UCP excretion rate appears to be a more sensitive index of disturbed porphyrin metabolism than the 24-hour total UCP excretion if the amount of UCP excreted in each collection interval is not unduly low. This is especially true for people with disturbed porphyrin metabolism because a single determination will often fall within the normal range regardless of the length of the collection period.

On the basis of this preliminary study, it is suggested that for healthy people the coefficient of variation

(C.V.) of four-hour UCP excretions is 30 or less; for patients with abnormal porphyrin metabolism the C.V. is 40 or over. The interval between 30 and 40 is indeterminate.

Sheldon, Walter H. and Heinz Bauer, Emory University School of Medicine, Emory University, Georgia, "Activation of Quiescent Mucormycotic Granulomata in Rabbits by Induction of Acute Alloxan Diabetes," *J. Exp. Med.* 108:171-177 (July) 1958.

In normal rabbits subcutaneous granulomata produced by the injection of a spore suspension of *Rhizopus oryzae* remained confined to the site of inoculation, showed no fungus proliferation, no longer yielded the agent on culture 10 weeks after inoculation, and eventually healed. Similar well established granulomata in rabbits with acute alloxan diabetes induced 8, 10 and 15 days after injection of the fungus uniformly showed activation of the infection. This occurred only in animals showing acetoneuria. In these animals the skin lesions showed proliferation of the fungus frequently associated with invasion and early necrosis of the granuloma wall. In some instances, spread of the infection to adjacent tissues with invasion of blood vessels had occurred. These experiments illustrate that changes in host metabolism can activate a preexisting quiescent infection.

Robinson, David, and Jack M. Levene, 104 E. Taylor St., Savannah, Georgia, "Oral Renografin: A New Contrast Medium for Gastrointestinal Examinations," *Am. J. Roentgenol.* 80:79181 (July) 1958.

Oral Renografin Solution 76 per cent (Squibb) is an aqueous solution of the soluble salt of 3,5-diacetyl-amino-2,4,6-triiodobenzoic acid. For oral use it is lemon flavored. This medium was evaluated in 41 routine upper gastrointestinal examinations (including one small bowel study and three esophageal studies) as well as six colon examinations.

The medium was found to be safe. In many ways it was superior to the conventional barium sulfate suspension; namely in mucosal contrast, tolerance, and safety of administration. It is especially recommended for oral administration where bowel obstruction is suspected. It presents certain disadvantages in the study of the esophagus and colon, but these disadvantages can be obviated by additional study and research. The problem of diarrhea is present when given orally; however, this problem is much less than that of the constipation encountered when using barium sulfate.

Medical Association of Georgia 1959 Annual Session

May 17-20, 1958

Augusta, Georgia

TENTATIVE PROGRAM

Georgia Academy of General Practice

Tenth Annual Session — October 15-16, 1958

Plaza Room

Dinkler-Plaza Hotel, Atlanta, Georgia

Dysmenorrhea, Dyspareunia, and Frigidity

Robert N. Creadick, Durham, North Carolina

The American Academy of General Practice After 10 Years

Norman H. Booher, AAGP Board of Directors, Indianapolis, Indiana

The Role of Geriatric in Health of the Present and Future

William B. Kountz, St. Louis, Missouri

Office Pediatrics

Julian P. Price, Florence, South Carolina

Office Management of Renal Disease

Harvey Knowles, Cincinnati, Ohio

The Gynecological Cancer Problems

Robert N. Creadick, Durham, North Carolina

Clinical Value of Liver Biopsy

Edward A. Gall, Cincinnati, Ohio

Diagnostic and Therapeutic Uses of Radio Isotopes

Marshall H. Brucer, Oak Ridge, Tennessee

Errors In Chest Diagnosis

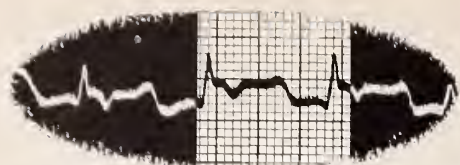
I. Meschan, Winston-Salem, North Carolina

New Analgesics in Obstetrics

John J. Bonica, Tacoma, Washington

Peripheral Vascular Disease

William S. Dye, Chicago, Illinois



heart page

The Heart and Allergy

C. Raymond Arp, M.D., *Atlanta*

ALLERGY IS A VASCULAR disorder. It has for a long time been defined as a state of altered reactivity. Allergic or sensitized tissue responds to a specific stimulus (antigen) in an unusual manner, compared to a similar non-allergic tissue. According to this definition, a wide range of diseases can be classified as allergic, even rheumatic fever and rheumatic heart disease.

Atopic allergy is hereditary and antibodies against specific allergens (antigens) can be demonstrated in the blood serum of atopic people by skin reactions to allergens. In acquired allergy or the anaphylactic type, these antibodies are not demonstrable, but precipitins are demonstrable.

Allergic reactions are of two kinds—reversible and irreversible. The reversible allergic reaction consists of (1) smooth muscle spasm, (2) capillary dilation, and (3) exudation of fluids and cells, including a large percentage of eosinophils with histiocytes and other leukocytes. After the allergic process subsides, the involved tissues will show no gross or microscopic abnormalities as, for example, with urticaria.

In the irreversible allergic reaction there is often thrombosis of small arterioles, inflammation of collagen tissue, necrosis, and, finally, repair by fibrosis. This consists of two types—immediate (Arthus's phenomenon) and delayed (tuberculin type).

Considering the pathologic physiology of allergic reactions, it is easy to see that any tissue in the body that has a blood supply can become involved in an allergic reaction.

Heart disease secondary to allergy in some other part of the body is demonstrated in cor pulmonale secondary to bronchial asthma.

Disturbances of cardiac rhythm do occur as the result of allergic reactions. However, there is still room for debate as to whether allergic reactions in cardiac tissue produce the arrhythmia or whether

it is a reflex reaction to an allergic process outside of the heart. Whatever the mechanism, paroxysmal auricular tachycardia and, less frequently, auricular fibrillation and flutter, have been caused repeatedly by the ingestion of allergenic foods, drugs, and antibiotics, and prevented by eliminating these. The more common well-known allergenic drugs and antibiotics are aspirin, sulfonamides, and penicillin, but recently there are numerous reports of tetracycline, Aureomycin,[®] Terramycin,[®] and streptomycin producing these reactions.

The author has one patient who has paroxysmal auricular tachycardia after ingesting scotch whiskey but not after rye or bourbon. One patient with a known sensitivity to sulfonamides had paroxysmal tachycardia after taking tolbutamide to control his diabetes on three separate trials. Tolbutamide is supposed to be less allergenic.

Allergic pericarditis is rare but Harkavy reports three cases.

Allergic injury to the myocardium is less rare and autopsy studies have shown multiplication of interstitial cells, necrotizing arteritis, and periarteritis of the coronary vessels, leukocytic infiltration with a large percentage of eosinophils. Permanent and transitory electrocardiographic changes occur. Allergens reported include penicillin, aspirin, horse serum, trichinosis, arsphenamine, and neoarsphenamine reactions.

Angina pectoris with seasonal variation accompanying asthma was partially relieved by allergic therapy in one case and relieved entirely in several others reported. Tobacco allergy is a cause of angina has been shown even by passive transfers, demonstrating a specific antibody in 11 of 14 cases studied.

Coronary thrombosis has been caused by or precipitated by insect bites, serum reaction, and typhoid vaccine in which allergy was thought to be a prominent feature.

Allergic endocarditis has been produced experimentally in fatal serum reactions.

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

Hypertension controlled by avoiding allergenic foods and reproduced by ingesting them has been reported by several investigators. One patient with hypertension and asthma had a fall in blood pressure with each injection of adrenalin.

Differential diagnosis between allergy and heart disease is often difficult and important as in the following situations: Asthma, cardiac vs allergic; rheumatic fever with murmurs vs. allergic arthritis and functional murmurs; angina vs. allergic esophageal spasm or cardiospasm; angina decubitus vs. angina secondary to reflexes arising in an allergic bowel; and substernal discomfort or tightness (an-

gina) vs. substernal discomfort due to subclinical bronchial asthma.

The masked inter-relationships of heart disease and allergy are important as in mild left ventricular failure, triggering bronchial asthma, or unrecognized bronchial asthma contributing to chronic congestive failure.

As in many other clinical pictures, one should think of allergy in a patient who has shown allergic syndromes such as hay fever, in a patient with considerable allergy in the family, and in a patient whose illness cannot be explained on any other basis.

HOSPITAL CARE FOR INDIGENT / Continued

criteria for determining indigency and need for hospitalization will be established at the county level with a minimum of state requirements. Another important provision in the new program is that there shall be free movement of patients and funds between counties so that the location of hospital care may become a medical determination for the best interest of the patient.

Hospitals will be reimbursed at an official per diem rate of 85 per cent of the non-profit basic hospital cost. This percentage was established to be in harmony with other medical care programs under the sponsorship of the State of Georgia. The method of payment to hospitals shall be on an individual patient basis according to a dual payment procedure. Under this method, the county will pay the hospital for the local share of authorized hospitalization and the Georgia Department of Public Health will pay the hospital for the state share.

There are certain pre-operational activities which are to be accomplished by the different local entities. The county governing authority will determine whether the program should be activated in their county. Later, the county will enter into a contract agreement with the Georgia Department of Public Health. This contract must declare the desire to participate, certify the approval of a local budget, indicate the appointment of an administrative agency, agree to pay for out-of-county hospital care, and give the assurance that the local medical society and hospital authority favor participation. The county governing authority must also review and adopt the County Program Plan which is submitted by the local agency administering the program.

The local administrative agency, which shall be the County Board of Health or other agency acceptable to the county governing authority and the

Georgia Department of Public Health, shall be responsible for preparing the County Program Plan. This plan is a narrative outlining in detail local program operational responsibilities which include policies on selection of hospitals, determining indigency, need for hospitalization, out-of-county hospital care, and payment of funds. This agency will also be accountable to adopt local policies necessary to program administration and delegate administrative functions as it deems necessary.

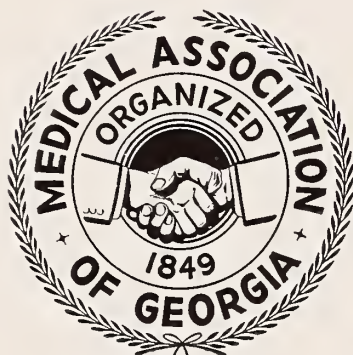
Hospitals desiring to participate in the new program will be expected to submit an application for approval as a participating hospital. They will also submit a resolution approving the acceptance of patients from specified counties.

Physicians, in addition to their active role in the actual operation of the program which includes the initiation of all patient applications, also have certain pre-operational obligations. Through their hospital medical staff a resolution must be submitted approving the acceptance of patients from specified counties. Through their local medical society a resolution favoring the participation in the local program is required.

Physicians are urged to become conversant with this new program as rapidly as possible. This is important because it is necessary for the following groups to exercise a cooperative effort if the program is to be activated in their county: county governing authorities, local boards of health, local health department personnel, local medical society, hospital medical staff, hospital governing board, and hospital administrator. Copies of the "Rules and Regulations" may be obtained from the Division of Hospital Services, Georgia Department of Public Health, State Office Building, Atlanta, Georgia.

1959 Annual Session

May 17-20, 1959—Bon Air Hotel, Augusta, Georgia



Second Call for Scientific Papers

All titles must be submitted to the respective
program chairman listed below before
November 1, 1958.

ANESTHESIOLOGY

A. J. Waters
University Hospital, Augusta

CHEST

Curtis H. Carter
Medical College of Georgia, Augusta

DERMATOLOGY

J. Malcolm Bazemore
1467 Harper Street, Augusta

DIABETES

Nathan DeVaughn
124 Seventh Street, Augusta

EENT

William O. White
1467 Harper Street, Augusta

GENERAL PRACTICE

C. M. Templeton
1333 Harper Street, Augusta

INDUSTRIAL SURGERY

Augustin S. Carswell
1407 Gwinnett Street, Augusta

MEDICINE

Harry T. Harper, Jr.
Medical Arts Building, Augusta
Louis L. Battey
1407 Gwinnett Street, Augusta

OBSTETRICS AND GYNECOLOGY

John T. Persall
1407 Gwinnett Street, Augusta

ORTHOPEDICS

Augustin S. Carswell
1407 Gwinnett Street, Augusta

PATHOLOGY

E. V. Hastings
St. Joseph's Hospital, Augusta

PEDIATRICS

W. A. Wilkes
1453 Harper Street, Augusta

PSYCHIATRY-NEUROLOGY-NEUROSURGERY

E. J. McCranie
Medical College of Georgia, Augusta

RADIOLOGY

Russell Wigh
Medical College of Georgia, Augusta

SURGERY

Robert G. Ellison
Medical College of Georgia, Augusta

UROLOGY

Robert Rinker
Medical College of Georgia, Augusta

MINUTES OF STANDARDIZATION OF INSURANCE FORMS COMMITTEE

THE COUNCIL COMMITTEE on Standardization of Insurance Forms was called to order at 2:45 P.M., July 19, 1958, Academy of Medicine, Atlanta, by Chairman Joseph Mercer.

Members of the Committee present included Chairman Joseph B. Mercer, Brunswick, and Charles T. Cowart, LaGrange.

Chairman Mercer reviewed a questionnaire sent to 48 states to survey the activity of other states in the field of standardizing insurance forms. Dr. Mercer also presented data about the progress of the Health Insurance Council of America in attempting to standardize health insurance forms.

On motion duly made and seconded, it was recommended that in cases of "pure" hospitalization, the insurance data for the hospitalization insurance forms be provided by the hospital from the hospital chart, and that it not be necessary for a physician to validate this information with his signature.

It was also recommended that in the case of medical or surgical coverage insurance policies, a standard form be recommended and that the physicians use this standard form in all medical and surgical claim cases; the physician attaching this standard form to the company form. The standard form would state that if additional information is necessary, the firm may obtain such from the doctor at a minimal charge.

Drs. Mercer and Cowart then designed a tentative standard claim form for presentation to the Council of the Medical Association of Georgia at their next meeting.

On motion duly made and seconded, it was recommended to MAG Council that the Medical Association of Georgia notify the Georgia State Association of Life Underwriters, Mr. George M. Conner, Executive Secretary, 202 Peachtree Arcade, Atlanta 3, Georgia, that a copy of the death certificate should be considered sufficient "Proof of Death" for the insurance company; that any further information required will be considered an investigation for the company and physicians will charge \$5.00 for filling out any special form for the company. The M.D. will bill the company directly for this service.

The committee further recommended that the Standard Industrial (weekly) claim form be adopted, and the Committee designed such a form for presentation to the Council.

There being no further business, the Committee was adjourned at 5:15 P. M.

GEORGIA HOSPITAL-MEDICAL MEDIATION COUNCIL MINUTES

THE GEORGIA HOSPITAL-MEDICAL MEDIATION COUNCIL met Wednesday, July 20, 1958, at the Academy of Medicine, Atlanta, Georgia. Official delegates present were: Mr. Frank Allcorn, Jr., Assn. of Hospital Govern-



the association

ing Boards; Mark Dougherty, Medical Association of Georgia; Milford Hatcher, Medical Association of Georgia; John Mauldin, American College of Surgeons; Mr. Arthur W. Smith, American College Hospital Administrators; Mr. Millard L. Wear, Georgia Hospital Association; and R. C. Williams, Georgia Department of Public Health. Official delegates absent were: Mr. David Hamilton, Association of Hospital Governing Boards; Mr. Whitelaw H. Hunt, Georgia Hospital Association; and Fred Simonton, Georgia Academy of General Practice..

The meeting was called to order at 2:40 P. M. by Temporary Chairman Glenn M. Hogan.

Preliminary Remarks

The Temporary Chairman reviewed the history of the formation of the new Council, dating from December 19, 1957, and restated its twofold objective: (1) to provide advisory or arbitration services, when called upon, to local situations having difficulties in trustee-administration-medical staff relationships; and (2) to carry out an educational program for the improvement of professional and administrative standards in Georgia's small hospitals. He stated that the pattern of the organization had been adopted through a series of planning sessions of a joint committee and had been ratified by all agencies concerned. The Temporary Chairman then called for nominations for a Chairman of the Council, to serve through March, 1959, and in accordance with adopted rules, not eligible to succeed himself.

Election of Chairman

Dr. Williams nominated Milford Hatcher as Chairman. On motion (Smith-Wear), unanimously carried, the nominations were closed. Dr. Hatcher was declared elected and assumed the Chair.

Executive Secretaries

Chairman Hatcher asked that the executive secretaries of the Georgia Hospital Association and the Medical Association of Georgia continue to serve on the Council as ex-officio, non-voting members. On motion (Wear-Dougherty), membership of the secretaries was so voted.

Delegates to Council from Anesthesiology, Radiology, or Pathology

Several names were discussed from the three specialties. Dr. Williams nominated George M. Hutto, radiologist, The Medical Center, Columbus, as first alternate

(in event of non-acceptance of the first nominee). Mr. Wear nominated Warren Matthews, pathologist, of Marietta, as a second alternate, and Dr. Dougherty nominated Bert Malone, radiologist, of Brunswick. The nominations were closed and immediately following this action, Mr. Krueger obtained acceptance of Dr. Hutto by telephone. Chairman Hatcher declared Dr. Hutto the eleventh official member of the Council representing the three specialties named above.

Vice-Chairmanship

Mr. Allcorn nominated Dr. Dougherty as Vice-Chairman of the Council to serve a concurrent term with the Chairman. A motion to close the nominations unanimously carried and Dr. Dougherty was declared elected.

Organization

In a series of motions the Council voted to (1) hold quarterly meetings on the first Sunday in March, June, September, and December at headquarters of the Medical Association of Georgia, Atlanta; (2) to rotate the chairmanship of the council among the several organizations as a matter of policy but not in a prescribed sequence; (3) to rotate secretarial responsibilities between the Georgia Hospital Association and the Medical Association of Georgia, with the GHA Secretary serving until March, 1959; and (4) to finance the secretarial function with appropriations of \$100 each, to be supplemented, if required, from the Georgia Hospital Association and the Medical Association of Georgia.

Council Purposes

Chairman Hatcher reviewed the five stated objectives of the Council in the areas of arbitration and education. On motion by Dr. Williams, the group voted to change the word "small" to "smaller" when referring to hospitals to be assisted by the Council's educational and standards program.

Program for 1958

Publicity: After discussion, it was voted to make the availability of the Council's services in arbitration and education known to the following groups in Georgia with responsibility for the communication, also, as follows: hospital administrators and hospital chiefs of staff to be notified by the Georgia Hospital Association; County Medical Societies and other medical groups to be notified by Dr. Williams. Dr. Hatcher appointed Secretaries Hogan and Krueger to draft an announcement letter and to submit it for adoption at the September Council meeting prior to its general distribution. The committee to draft the letter was cautioned that the Council's policy in arbitration situations would be to assist only when requested by *all* parties involved in a local dispute.

Education: The Chairman stated that a recommended professional standards program for small hospitals

had already been developed by the Medical Association of Georgia and suggested that the Council develop the standards further to include physical plant and administration. To develop an educational and standards program Chairman Hatcher appointed a committee consisting of John Mauldin, Chairman Mr. Millard L. Wear, and Mr. Frank Allcorn and asked that they render a report at the next Council meeting.

Next Meeting Date; Adjournment

The Council voted to hold its next meeting on Sunday, September 7, 2:30 P. M. in the office of the Medical Association of Georgia. There being no further business, the meeting was adjourned at 4:15 P. M.

ANNOUNCEMENTS

Clinical Cardiopulmonary Physiology, October 13-17, Edgewater Beach Hotel, Chicago, Illinois. Offered by the American College of Chest Physicians. Tuition \$100. Contact Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

Diseases of the Chest, November 10-14, Park-Sheraton Hotel, New York City. Course will offer the most recent advances in the diagnosis and treatment of chest diseases — medical and surgical. Tuition \$100. Further information may be obtained by writing to the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

International College of Surgeons Post-Graduate Course, October 13-25, Cook County Graduate School of Medicine, Chicago, Illinois. Conducted under the supervision of the attending staff of Cook County Hospital, Chicago and will include illustrated lectures, motion pictures, anatomy demonstrations, operative clinics, and practice surgery by the participants on anesthetized dogs. In addition to 20 hours of surgical anatomy on the cadaver, the program will include many lectures and demonstrations. For information write International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

Symposium on Carcinoma of the Colon and Rectum, October 20-21, Biltmore Hotel, New York, New York. Presented at the Annual Scientific Session of the American Cancer Society. In addition to the presentation of papers, the speakers will participate in a panel discussion as a part of each session.

Ophthalmic Plastic Surgery, November 17-21, (For specialists). Covers essentials of ophthalmic plastic surgery for the practicing ophthalmologist. Special emphasis on the more common fundamental procedures peculiar to lid surgery. These include such surgery as tarsorrhaphy, canthoplasty, excision, and repair of lid margin lesions, as well as the usual classical operations for the correction of ptosis, ectropion, socket les-

ions, etc. Instruction by lecture and demonstration. Under direction of Dr. Sidney A. Fox. Tuition \$85.00. Write: Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Avenue, New York 16, N. Y.

The American Rhinologic Society fourth annual meeting, Palmer House, Chicago, Illinois, October 17-18. Among topics to be discussed will be pulmonary and nasal physiology, laboratory and clinical aspects of bone transplants, hump removal, roof repair, and nasal process corrections. Write: Dr. Robert M. Hansen, 1735 North Wheeler Avenue, Portland 17, Oregon.

The first annual meeting of the Grady Hospital Clinical Society, an association composed of former members of the intern and resident staff of the Grady Memorial Hospital, will be held on October 20, 1958 at the Grady Memorial Hospital in Atlanta. Address all inquiries to the Grady Hospital Clinical Society, Room G-610, Grady Memorial Hospital, 80 Butler Street, S. E., Atlanta, Georgia.

Post-graduate course in Cardiac Resuscitation, offered by Emory University School of Medicine, October 3, 1958. To be held at Grady Memorial Hospital, Atlanta. Registration fee \$25.00. For registration or to request further information write: Postgraduate Education, Emory University School of Medicine, 69 Butler Street, S. E., Atlanta 3, Georgia.

DEATHS

WILLIAM EDWARD THOMASSON, Carrollton, died June 30 at the age of 73.

At the time of his death, Dr. Thomasson was still actively engaged in the practice of medicine.

He was a member of the First Methodist Church of Carrollton where he served on the Board of Stewards for a number of years and was a member of the Men's Bible Class.

Dr. Thomasson was a member of the Elks Club, a Rotarian, Shriner, and was a member of the Sunset Hills Country Club.

Survivors include his wife; a daughter, Mrs. Luther O'Hern, Ardmore, Oklahoma; three sisters, Mrs. J. G. Harris and Mrs. W. S. Campbell, both of Carrollton, and Mrs. J. C. Thomas of LaGrange; three brothers, Jess Thomasson, Carrollton, E. W. Thomasson, Newnan, and J. T. Thomasson, LaGrange; and two grandchildren, Candace and Billie Ann O'Hern of Ardmore, Oklahoma.

SOCIETIES

At the regular meeting of the BIBB COUNTY MEDICAL SOCIETY in August, Dr. Exum Walker, neuro-

surgeon of Atlanta, spoke on experiences which he has had and information which he has accumulated on medical malpractice suits.

PERSONALS

Second District

N. J. CROWE, Sylvester, has returned from Chicago where he took a two-week course in surgery given by the U. S. Section of the International College of Surgeons.

The Blakely Rotary Club has elected JAMES H. CROWDIS president for the coming year.

Third District

R. C. PENDERGRASS, Americus, was guest speaker at a meeting of the Community Men's Club of Leslie recently.

The American College of Chest Physicians has awarded WALTER G. ELLIOTT, Cuthbert, a Certificate of Fellowship.

Fourth District

THOMAS E. REEVE, JR., Carrollton, has been certified as a diplomate of the American Board of Surgery.

GEORGE KINNARD, Newnan, was installed as president of the Newnan Rotary Club at a July meeting.

ROBERT L. BENNETT, Warm Springs, was speaker at the annual meeting of the Fourth District Press Association which met in Warm Springs.

Fifth District

At the meeting of the Board of State Governors of the American Diabetes Association, CHRISTOPHER J. McLOUGHLIN of Atlanta was elected Chairman.

TED F. LEIGH, Atlanta, has been named Chairman of the Radiology Section of the American Medical Association. This announcement was made at the AMA meeting in San Francisco, California. Dr. Leigh presented the paper "Radiologic Characteristics of Mediastinal Masses of Neurogenic Origins."

At the annual meeting of the American College of Chest Physicians held in San Francisco, California, CARL C. AVEN, Atlanta, was elected Historian of the organization.

RICHARD GRAY, formerly of Atlanta, moved to Rome in August where he began the practice of general surgery.

Sixth District

MAX MASS, Macon, was honored recently by Macon doctors during a testimonial dinner given at the American Legion Post 3 in Macon. Dr. Mass has resigned his post as chief radiologist at Macon Hospital and will become associated with the Central X-ray and Clinical Laboratory in Chicago, Illinois, of which he is part owner.

Eighth District

T. K. STAPLETON, Pearson, has moved to Douglas where he will be associated with DAN JARDINE.

Ninth District

At the dedication of the Medical Building at Rainey Mountain Scout Camp, Clayton, G. T. NICHOLSON of Cornelia was master of ceremonies.

Tenth District

CURTIS H. CARTER, Augusta, has been awarded a Certificate of Fellowship in the American College of Chest Physicians.

ROBERT E. SHIFLET of Toccoa has been elected Commissioner of Roads and Revenues of Stephens County.

CALENDAR OF MEETINGS

Baldwin County, Milledgeville,
A. S. Sanchez, Secretary Oct. 13
Bulloch-Candler-Evans,
Forest Heights Country Club, Statesboro,
Kathryn S. Lovett, Secretary Oct. 14
Carrole-Douglas-Haralson,
H. L. Barker, Secretary Oct. 6
Chatooga County, Summerville,
H. A. Goodwin, Secretary Oct. 3
Cherokee-Pickens, Dr. and Mrs. Tom Boswell,
Tate, E. A. Roper, Secretary Sept. 26
Cobb County, Kennestone Hospital, Marietta,
Hugh Colquitt, Secretary Oct. 7
Colquitt County, Moultrie,
James T. Flynn, Secretary Oct. 14
Coweta County, Ranch House, Newnan,
Joe W. Parks, Jr., Secretary Oct. 14
DeKalb County, 761 E. College Ave., Decatur,
H. G. Carter, Secretary Oct. 20
Emanuel County, Emanuel County Hospital,
Swainsboro, H. W. Smith, Secretary . . . Oct. 7
Flint County, Crisp County Hospital, Cordele,
Joseph Christmas, Secretary Oct. 7
Fulton County, Academy of Medicine Bldg.,
Atlanta, T. J. Anderson, Secretary . . . Oct. 2
Habersham County, Commercial Hotel,
Cornelia, John J. Pilcher, Secretary . . . Oct. 2
Hall County, Gainesville Elks Club,
Hamil Murray, Secretary Oct. 20
Jefferson County, Jefferson Hotel, Louisville,
A. P. Mulkey, Secretary Oct. 8

Laurens County, Dublin Country Club,
John A. Bell, Secretary Sept. 25
Mitchell County, Mitchell County Hospital,
Camilla, A. A. McNeill, Secretary . . . Sept. 30
Muscogee County, Standard Club, Columbus,
A. C. Hobbs, Jr., Secretary Oct. 28
Oconee Valley, M. G. Boswell Hospital,
Greensboro, George Green, Secretary . . Oct. 2
Peach Belt, Peach County Hospital,
Fort Valley, W. G. Tolbert, Secretary . . Oct. 21
Richmond County, Old Medical College Bldg.,
Theodore Everett, Secretary Sept. 30
Spalding County, Elks Club, Griffin,
J. W. Watkins, Secretary Oct. 7
Upson County, Upson County Hospital, Thomaston,
Doug L. Head, Jr., Secretary Oct. 14
Walker-Catoosa-Dade, Dr. N. H. Hutchinson,
Trenton, E. M. Townsend, Secretary . . . Sept. 30
Ware County, Waycross,
A. M. Knight, Secretary Oct. 20
Washington County, Rawlings Hospital,
Sandersville, M. W. Hurt, Secretary . . . Oct. 15
Wayne County, Jesup,
Albert L. Howard, Secretary Oct. 13
Whitfield County, Library,
Hamilton Memorial Hospital, Dalton,
James F. Redfern, Jr., Secretary Oct. 15
Wilkes County, Wolf's Barbecue, Washington,
J. N. Shearouse, Secretary Oct. 21

STATEMENT ON VETERANS' MEDICAL CARE

REPRODUCED BELOW IS the statement of the American Medical Association before the House Committee on Veterans' Affairs relative to the number of hospital beds to be authorized in Veterans' Administration facilities. Testimony was presented by Dr. Russell Roth on July 24, 1958.

Mr. Chairman and Members of the Committee:
My name is Russell B. Roth, M.D., of Erie, Pennsyl-

vania, where I am engaged in the private practice of medicine. I appreciate the opportunity of again appearing before your committee. My last appearance was on March 5, 1957, when I represented the American Medical Association as a member of the Committee on Federal Medical Services. I appear again today as chairman of that committee.

My testimony today concerns the position of the American Medical Association with respect to the
Continued on page 575

CURRENT CLINICAL CONCEPTS

TRACHEOSTOMY IN EMPHYSEMA

Tracheal fenestration is a new concept in treating emphysema. In a series of six patients, four of whom had advanced suppurative emphysema, in which tracheostomy was done three have been able to leave the hospital with excellent management of secretions. The main source of respiratory difficulty in both wet and dry emphysema is secretional occlusion rather than bronchial spasm.

Abstracts of medical papers presented at the annual meeting of The American Trudeau Society held in conjunction with the meetings of The National Tuberculosis Association and The National Conference of Tuberculosis Workers, May 18-23, 1958.

MALE INFERTILITY

The treatment of the patient with oligospermia has indeed been unsatisfactory. However, encouraging results have been obtained by the use of Liothyronine (Cytomel) in the treatment of male infertility and has resulted in a consistent increase in both motility and number of spermatozoa. In the author's series 74 per cent of the patients revealed increases in total number of motile sperms of more than 10 per cent over pretreatment values. Azospermia did not respond to the therapy. The drug is the cellular-active form of thyroid hormone, and in the recommended dosage of 5 mcg to 25 mcg daily encouraging responses have been obtained.

J. Urol., Vol. 80:49, 1958.

CORTICOSTEROIDS IN POISON IVY

Rhus radicans (poison ivy), the East United States predominately, and *Rhus toxicodendron* (poison oak), the West United States predominantly, are the most important dermatitogenic plants in the United States. The four allergens in these plants have the common chemical skeleton of the Catechols, and the allergenic principle is present in all parts of the plant.

All persons can become sensitive with sufficient

exposure at the approximate time. Fifty per cent of young adults will react positively to application of crushed leaves. Sensitivity gradually declines with time. A minimum of persons over 60 are sensitive. Poison ivy sensitivity *cannot* be prevented by prior feeding or contact with the allergen. There is *no* typical measure which will adequately protect against field exposure, and *no* typical therapy is efficacious and moderating or aborting for the dermatitis, as compared with the usual non-specific dermatologic measures. The corticosteroids are the only systemic agent that demonstrates the ability to benefit the dermatitis. The treatment of poison ivy dermatitis by administration of the *Rhus* allergens (poison ivy "shots") during acute attack is irrational and dangerous.

A. M. A. Archives of Dermatology, 77-149 (February) 1958.

HYPERNEPHROMA

One should search for hypernephroma in patients with polycythemia vera. Damon and Holum reemphasize this fact. There is evidence to support the view that hypernephroma is not merely associated with polycythemia vera but may be responsible for the latter in 4.4 per cent of the cases. Jacobson has suggested that the kidney produces an erythropoietic factor but this is still not confirmed.

Ann. Int. Med. (July) 1958.

SERUM TRANSAMINASE

The serum transaminase may be abnormally elevated following dissecting aneurysm of the aorta. It was suggested by Treadway and Kimball that an elevated transaminase develops when there is intra-pericardial hemorrhage. It now appears that the serum transaminase can be elevated in many diseases other than myocardial infarction. This list includes pericarditis, dissecting aneurysm, pulmonary infarction, myocarditis, cardiac arrhythmias with ventricular rate of over 160, pancreatitis, crush injuries involving muscle, embolus to an extremity, hemolytic crush, dermatomyositis, disseminated lupus erythematosus, as well as liver disease. Therefore, as with all laboratory tests, it is essential that the transaminase be interpreted in the light of the clinical picture.

Circulation (July) 1958.

PARALYTIC ILEUS WITHOUT SUCTION

1,000 patients with paralytic ileus have been treated without gastrointestinal suction. This method of treatment does not delay the return of peristalsis in patients with paralytic ileus. Comparable cases were compared. Patients from whom suction was withheld were more comfortable, were more easily maintained in water and electrolyte balance, and required less nursing care than the intubated patients. In the non-intubated group there were far fewer respiratory tract complications. Acute gastric dilatation has not been seen in the non-intubated cases. It is mandatory that *all* oral intake be withheld from patients with paralytic ileus if nasogastric suction is withheld.

S. G. O., 107:247-250 (August) 1958.

CHVOSTEK SIGN

The Chvostek sign has been reported positive in many unrelated disease processes. These include the following: tetany in the newborn; hypoparathyroidism; alkalosis; rickets; diphtheria; measles; scarlet fever; whooping cough; typhoid fever; tonsillar diseases; enteroptoses; myxedema; and joint neuralgia and tuberculosis. However, even in low calcium or hypoparathyroid tetany the Chvostek sign is not always positive. The Chvostek sign has also been positive in individuals without any known disease.

In a total population (several hundred) tested there was a 24.7 per cent occurrence in a positive Chvostek sign. No correlation was demonstrated between the occurrence of a positive Chvostek sign and blood or urinary changes or the presence of specific disease processes.

The American Journal of Surgery 96:33-37 (July) 1958.

CRITERIA FOR ACADEMIC SURGERY

It is the sick patient in need of care, the research that helps that care, and the student learning from it, all taken together that constitute university Surgery. It is not a bibliographic reference that is our focus, but a sick patient made well and a student made wise.

RE: Research—Emphasis must be on thrifty quality, not wastefully diffuse mediocrity. The platitude "publish or perish" was coined to describe the academic environment in which publication, no

matter of what, was the *sine qua non* for personal advance. If universities do not do a good job for surgical research, others will be there ready to grab the plum. There are many institutions in the country other than the universities happily waiting to do surgical research.

The best counter-balance for a lot of poor research is a small amount of excellent research. Three criteria are most important: originality, productivity, and significance.

Surgery 44:1-10 (July) 1958.

MILK ALKALI SYNDROME

Mental confusion in a patient with a duodenal ulcer should force one to consider the milk-alkali syndrome in patients who medicate themselves with large amounts of alkali and milk for the relief of ulcer symptoms. These symptoms can be precipitated by vomiting and may be associated with renal insufficiency, alkalosis, hypercalcemia, and a normal serum phosphorus and alkaline phosphatase.

American Journal of Medicine (February) 1958.

QUINIDINE IN PULMONARY RESECTION

In three series of 100 cases of pulmonary resection Hurt and Bates demonstrated that for those who had five grains of quinidine four times daily from day of operation to the tenth post operative day, the incidence of cardiac irregularities was diminished to 14 per cent with intrapericardial resection and nine per cent with extrapericardial resection. Those patients receiving none had incidence of 45 per cent to 21 per cent and that group getting it for only five days had figures of 36 per cent and 24 per cent. These irregularities were predominantly atrial fibrillation.

Thorax, 13:39-41, 1958.

UNCONTAMINATED URINE SPECIMENS

Clean caught specimens of urine (caught in mid-stream after sterilization of perineum with an antiseptic solution and with gauze pack at vaginal orifice) are less apt to be contaminated than catheter specimens and their use for cultures circumvents the danger of infecting the bladder.

Personal Communication: Arthur J. Merrill, M.D.

VETERANS' CARE / Continued

proper number of hospital beds which should be authorized in Veterans' Administration facilities for the care of war veterans—a question which is developed in some detail in House Committee Print No. 222. We have been especially interested in the study made by the Veterans' Administration, the Public Health Service, and the American Hospital Association, which is reported in that document, with its projections, through the year 1986, of the medical facilities required for veterans under various possible plans for future admissions.

Our Association holds one fundamental conviction on this subject. We believe that the Department of Medicine and Surgery of the Veterans' Administration has a single prime purpose—that of providing care of service-incurred or aggravated disease or disability. It was not created by Congress as an instrument of scientific research. It was not designed as a training ground for young doctors. And it was not intended as an agency for providing indigent medical care to the veteran population. It was developed for one purpose only—the provision of unstinting care for the war-injured.

And yet today any analysis of V.A. figures shows that service-connected medical care is a dwindling phase of V.A. operations. It is inevitable, as time separates us from the periods of actual combat, that there shall be even fewer cases of acute short-term service-connected illness, and that even these are likely to be acute episodes in the course of chronic disabilities. As the experience of the past is projected into the future, it is apparent that service-connected care not only diminishes in volume, but becomes overwhelmingly chronic in character. *Even now something less than 15 per cent of all new admissions to the V.A. are for service-connected care, and we suspect that most of these are readmissions.*

No one denies that the V.A. facilities are already greatly in excess of the requirements for service-connected care. It therefore follows that any further extension of V.A. medical operations can be justified only as an expansion of non-service-connected care. When Mr. Harvey Higley was V.A. Administrator, he clearly stressed that point during your 1956 hearings. But what is the effect of this emphasis and concentration on non-service-connected care? It can only mean de-emphasis and dilution of service-connected care. There are many factors which must be considered. Who carries out the actual medical care in the Dean's Committee hospitals today—the experienced physician or the trainee? What class of patient commands the major attention of the teachers and the trainees in our V.A. hospitals today—the chronic, long-term inmates or the more dramatic, challenging, active problems that make up 85 per cent of new admissions? What techniques are being employed in patient care—the conservative and well-tested, or the experimental techniques of research? Is the continuing care of the war-disabled veteran still truly of first magnitude concern to the V.A., or has it dropped to a matter of third or fourth magnitude? We would ask your Committee to consider these questions critically.

Closely related to this problem is the whole subject of V.A. responsibility for care of non-service-connected disability. At the present time approximately 48 per cent, almost half, of all veterans hospitalized for the

care of non-service-connected disabilities are under V.A. auspices, and yet the studies of the Bradley Commission have shown that veterans in general are better off than non-veterans in respect to income, education, and level of employment. You have perhaps seen the lead article in the July issue of *Harper's Magazine* by Mr. John E. Booth, himself a veteran, who comments, "Veterans, who are now better off as a group than the rest of the population, will also be better off in their old age; they'll acquire more savings, private pension-plan payments, and other benefits than non-veterans." If this be true, and it seems reasonable in view of the all-out effort made by Congress and this Committee to aid the serviceman in his return to civilian life, how can it follow that nearly half of all veterans with non-service-connected conditions are in an "inability-to-pay" category entitling them to V.A. hospitalization? And let us note that this is not a figure distorted by a preponderance of chronic tuberculous and neuropsychiatric cases. The figure is 45 per cent of the cases in the general medical and surgical classification. Mr. Booth, in the previously mentioned article, has as his thesis the view that such an unrealistic program subsidizes veterans who do not need it—"while the seriously disabled who do need it get short-changed."

In any event, Congress should surely determine its policy. Is it intended to furnish tax-paid federal medical care for all veterans who request it, and who are willing to indicate "inability to pay"? There are sizable waiting lists in this category, as you know. Future projections guarantee that as our wartime veteran population ages these lists will grow. If there should be an insistence on the part of Congress that the taxpayer actually is responsible for the care of disability unrelated to service, then there most assuredly is an obligation upon that Congress to define what constitutes "inability to pay." Today this is a matter of individual conscience. Mr. Booth refers to the affidavit on the 10-P-10 form as "something of a joke" because the law forbids the V.A. even to check up on it. Why should this be so? We would ask a sincere question: "Would this Committee permit the V.A. to grant a pension to a veteran without ascertaining his income level and his circumstances of need?"

What does the non-veteran do about the cost of illness? He buys insurance, or he pays in installments, or he meets the cost in other ways. If he really cannot afford hospitalization, the community pays for it. The AMA's Committee on Indigent Care has made a number of field studies on local and state medical care plans—a report of that Committee's studies occupies 90 pages of the record of your July 1953 hearings. This report does not disclose that there is even one welfare department in the country which will pay for a man's medical care purely on his unsupported statement that he can't afford it.

We would respectfully suggest that this Committee authorize a serious study by the Government Accounting Office and the Veterans' Administration on the subject of income levels in NSC cases—primarily in the GM and S hospitals. We would further suggest strengthening of the law to permit examination of the admission affidavit which is so lightly considered in these times.

Now may we examine further the implications of this recent projection of future needs for V.A. hospital

VETERANS' CARE / Continued

beds. The inexorable processes of nature furnish the patients. Medicine and its allied professions must provide the personnel. Congress must appropriate the funds for the mountains of brick and mortar which will be required to expand the facilities. And the taxpayer must produce the cash. It is certainly to the taxpayer's interest to know that his money is wisely spent. What will a million dollars of tax money do today in providing medical care? Our studies indicate that one million dollars in a Veterans' Administration GM and S hospital will care for 1,696 veterans. In a private GM and S hospital it would care for 5,389 patients—not veterans alone. It would include veterans' wives, children, parents, friends, and neighbors. Look at the same arithmetical problem in reverse. One hundred NSC veterans receiving FM and S care in a V.A. hospital cost the taxpayer \$58,953.00; while in a private non-federal general hospital, the cost would be \$18,572.00. We do not believe that throwing away nearly 70 cents out of every dollar spent on this medical care is a reasonable financial course for this nation.

We have dwelt largely on the problems of GM and S hospitals for a very real reason. It is our contention that the responsibility of government in various categories of illness must be defined. We submit that all non-service-connected illness in those unable to pay is the responsibility of government at the local community level. Chronic care for tuberculosis has traditionally been provided by the state government, acting for the communities, and this is probably true also in most neuropsychiatric disabilities. What then is the responsibility of the Federal Government to its disabled citizens be they veterans or non-veterans? This, we believe, needs definition. States for the most part can already meet the NSC needs in tuberculosis. As yet they cannot meet the neuropsychiatric needs and we will concede an interim period during which V.A. facilities which already exist may very appropriately be used. It is not, however, the responsibility of the Federal Government to operate a system of medical care for illness unrelated to military service in vicious competition with the private free-enterprise medical care system and the now well established insurance principles.

It has been alleged in correspondence between your Committee, the President, and the Administrator of the Veterans' Administration that there has been a reduction in V.A. hospital beds. This, we are convinced, is a bit of statistical sleight of hand. The accomplished daily patient load has increased annually to a present high of 111,740 and the average number of V.A. operating beds has similarly increased to a current peak of 121,257. By no criterion do these figures reflect any contraction in operation nor do they substantiate the statement which has been made that current policies being followed by the Veterans' Administration at the direction of the Bureau of the Budget are circumventing the policy for hospitalization of war veterans as established by Congress. The alarming thing is that no contraction of operations seems to be anticipated. The Administrator of the V. A. reports an increase in operating beds in the next 18 months, and an increased rate of construction of new facilities in the next fiscal year. Today, according to Mr. Whittier's figures, we have three times as many operating beds as service-connected patients.

By 1986, according to the projections of the House Committee Print No. 222, we will have five times as many operating beds as service-connected patients—without building a single new bed. Already 75 per cent of the tuberculous patients and 90 per cent of the GM and S and neurological patients are being treated for non-service-connected conditions. The main function of the V.A. hospital system has become, in fact, if not in law or theory, the provision of non-service-connected care. The American Medical Association is not alone in deploring such an evolution. Two comprehensive studies of the Veterans' Administration have been made during recent years, both under chairmanship of persons of illustrious background and unassailable ideals of loyalty—Gen. Omar Bradley and Mr. Herbert Hoover. Both studies have reached conclusions closely akin to our own. There is a grave responsibility in plotting a course which runs counter to the sound advice from these sources.

Finally, let us comment on the worth of our testimony. We are not asking for more jobs for physicians. We do not ask for more or larger fees. True—we have been accused by veterans organizations, and by the V.A. itself in times past, of a selfish interest in this subject. But let me assure you that if this were a conflict between the best interests of the patient-public and the vested interests of the medical profession, the profession would inevitably yield to the public as it has on every occasion in the past. We ask not for an increase in V.A. medical jobs, but for a decrease. We ask the Federal Government not to pay us for medical services to multitudes of patients whom we are prepared to serve without charge in our community hospitals. We do not think you can honestly find us insincere. We ask if you feel that the wartime wounded of our armed services—in the far-flung combat areas of Europe, the Pacific, and Korea—received devoted and competent medical care at the time of their greatest need. If the answer is "yes," we would only point out that the physicians who provided these services, having passed in large numbers from service into civilian practice, are the ones who bring this testimony today. We who practice medicine are predominantly veterans, and we are also taxpayers, 100 per cent of us.

In American medicine we may give our professional advice, but it is still up to the patient to decide whether this advice shall be followed or ignored. So it is here. We can only tell you, earnestly and sincerely, that in our considered judgment the veterans of this nation will be best served by a non-federal medical care system. We will pledge our assistance to you in every possible way in maintaining care for service-connected disability at the highest possible level. We will cooperate with you to the utmost in planning the complicated matter of returning non-service-connected care to the communities, where it properly belongs.

Thank you, Mr. Chairman. I shall be happy to answer any questions the Committee may have.

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WORLD PEACE THROUGH MEDICINE

Gunnar Gundersen, M.D., *LaCrosse, Wisconsin*

I AM HONORED to extend greetings from the American Medical Association at this 104th Annual Session of the Medical Association of Georgia. I consider it a personal privilege to be a part of this meeting which attests to so many years of medical progress.

I am familiar with the history of your State Association. Physicians in Georgia have certainly been active in developing sound, progressive medical education and practice throughout the state. The Medical Association of Georgia can also take pride in its contributions to the activities of national medicine through the A.M.A. Drs. Eustace A. Allen and Spencer A. Kirkland of Atlanta, and Dr. Charles H. Richardson of Macon are members of the A.M.A.'s House of Delegates. Dr. J. W. Chambers of LaGrange, Dr. William R. Dancy of Savannah, and Dr. Henry H. Tift of Macon are alternate delegates. In addition, Dr. David H. Poer of Atlanta has served as a member of the A.M.A.'s Council on National Defense.

The efforts of these men, and of others from our constituent state and territorial groups, bring local opinions and ideas into national focus. Their co-operative efforts are resulting in many positive actions of profession-wide importance.

We can look back on the last 50 years as the most fruitful years that medicine has ever known. The gratifying part about this progress is the fact that medical men in Georgia, in the United States, and throughout the world have made it possible by working under one bond . . . to ease pain and suffering.

During the last year, whether I traveled through

our own country, through Europe, or through the Middle East, I found proof that physicians everywhere speak the same language. And with today's ease in arranging long-distance travel and communication, it is not surprising that person-to-person contacts now play an important part in both national and international medical affairs.

The clasped hands on your Association seal accurately symbolize the future of medicine. Our need for unity is fundamental if we are to resist dividing influences and keep our strength to extend our knowledge and purpose toward the better health for all people.

Medical Unity

The importance of medical unity was brought home to me during my European trip which included stops in Sweden, Russia, and Istanbul, Turkey. In all these places, I saw medicine at work under different circumstances and restrictions. The ideologies under which medicine was practiced may have been different, but the goal was the same; the easing of distress and the improvement of health. Everywhere, I recognized this union of purpose. And everywhere, I felt that this purpose could best be achieved in an atmosphere where the rights and privileges of the individual are respected.

As I watched the delegates at the World Medical Association meeting at Istanbul—with their different skin colors, their different clothes, their different languages—I was struck by their oneness of purpose. Though widely separated in culture and speech, they were, nevertheless, all seeking help for the ailments of mankind.

This year, the World Medical Association celebrates its tenth birthday . . . a decade of service toward uniting the doctors of the world and raising

medical standards. I wish that all members of the medical profession, not just the members of the W.M.A., could in some way get together. Once would be enough. Out of that one meeting would come, I am sure, the recognition that medicine speaks a universal language throughout the world.

Can you imagine how any group sharing such a common purpose could sit down together and plot war? Their only kind of war plot would have to be war against disease.

Universal Peace

Universal peace has been a dream of mankind for many years. Plans for such a peace have always required one common ground upon which all people could understand one another. A universal language has been suggested since people instinctively distrust what they do not understand. This, as you know, has demanded too great an educational effort.

International law has been suggested, but even in the United States we have different medical licensing laws in each of our 48 states.

Free trade and commerce with a universal currency has been suggested. But economic differences have made this impossible. Universal religion or some sort of world government have gotten nowhere. Intense nationalistic sentiments, the bias, the tradition, the bigotry . . . these are some of the barriers which keep the people of the world apart.

Yet, in the realm of the arts and sciences, we have common communication. Medicine, while admittedly an imperfect art and a growing science, seems to me to meet the basic requirements for universality. A doctor may not know the language of an area, but he can recognize that appendicitis in Istanbul is the same as appendicitis in Macon and has to be treated the same.

Medicine has one advantage over every other profession in that the doctor is always trying to do something to benefit someone else. Moreover, because of the great medical advances, he has a lot more to offer. Medicine's ideals, its diagnosis, treatment, rehabilitation, together with today's rapid communication give us the greatest possible framework for its use as an instrument for world peace. Yet, even these humanitarian aspects of medicine have strange obstacles to overcome.

For example, the World Medical Association received reports that Cuban doctors, during the present political upheaval, are being persecuted and murdered while carrying out their humanitarian service to the sick and wounded regardless of the political beliefs of the patient. Apparently in Cuba during a revolution, there is little thought given to individuals as human beings.

Steps were taken through the proper authorities to investigate these allegations. The World Medical Association protested to the Cuban government. Meanwhile, the W.M.A. is standing firmly behind the humanitarian principles of its Declaration of Geneva, and its Regulations Governing Doctors During Armed Conflict. These principles state that doctors must give their first consideration to the health of their patients, that they must not allow reasons of religion, nationality, race, party politics, or social standing to intervene between them and their duty to their patients, and that they must practice inviolable secrecy on whatever is confided in them by their patients.

Medicine in Russia

Before attending the meeting of the World Medical Association, I was privileged to take a trip into Russia. In all fairness to Russian medicine, I must say that I met friendly, intelligent, well-informed scientists doing impressive research work. The ap-



ABOUT THE AUTHOR

Gunnar Gundersen, M.D., president of the American Medical Association, is a native of La Crosse, Wisconsin, where he operates the Gundersen Clinic in conjunction with three other physician brothers. He obtained his B.S. at the University of Wisconsin and his M.D. at Columbia University. He served his internship and residency at LaCrosse Lutheran Hospital. Dr. Gundersen was the first chairman of the Joint Commission on Accreditation of Hospitals when it was formed in 1951. He is a past president of the Wisconsin State Medical Association and a past speaker of its House of Delegates. He is a past president and former member of the State Board of Regents of the University of Wisconsin. He is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and the International College of Surgeons, a member of the Council of the World Medical Association, and a member of the American Public Health Association.

parent candor and honesty of the Russian physicians helped me to put together a fairly clear picture of medicine in Russia. It turned out to be the age-old picture of professional ethics and ideals striving to live under uncompromising political control.

The Soviet physician is a public servant whose primary loyalty is to the state. His patients belong to the state and not to the individual practitioner who assumes full charge and responsibility for his patient. The physician is constantly being prodded to keep the workers in good health, not necessarily to protect the patient, but to maintain production. He has no professional organizations to which he can turn for help or advice.

The Russian system, as I saw it, made home look mighty good. Anyone interested in the extension of the welfare state should go to Russia and see for himself what the situation is. It is quite obvious that with the total welfare state, freedom ceases to exist. It tends to level everyone downward, and certainly fails to upgrade anything. If what I saw in Russia represents an improvement over conditions before the Revolution, I can only think that the conditions at that time must have been unspeakable.

The welfare state, which always includes the regulation of medicine, is running into trouble in Sweden. The farmers are rebelling against high cost of governmental handouts. Their voice of traditional independence is strong enough to be heard in Stockholm. This rebellion on the part of the agrarian population is especially interesting in view of the fact that Sweden is considered by many to have the ideal pattern for a workable socialism.

International Healing

In spite of these strange moral and political barriers, I believe that the promotion of international healing is one of our best means of promoting international cooperation and understanding. Whatever we do to promote health will also promote peace. We can reap tremendous dividends in friendships and appreciation for our way of life. The more we do on a private scale means the less that governments of the world are required to do.

In a special television appearance to introduce the A.M.A.-S.K.F. hour-long program called "M.D. International," Vice-president Nixon said: "In the current arms race, the nation must not overlook the forceful good that lies in the basic brotherhood of man. A hand outstretched, a heart full of goodwill, can do more to win the affection and support of people than all the guns in our arsenal.

"American doctors who fight disease in remote corners of the world," Mr. Nixon continued, "are, in effect, unofficial United States ambassadors of good will. Through their humane work, they are

making a positive contribution to the structure of peace. At a time when we hear so much of man's inhumanity to man, they reveal our greatest hope for the future—man's humanity to man."

Now, let's consider a paradox. From tradition and the personal nature of his profession, the doctor is an individualist. At the same time, he realizes that there must be cooperation and organization in the profession in order to achieve the best collective results.

It is a curious fact that members of the medical profession have never had full control over their own fates. Our hospitals, our medical schools, our public health activities, and our conditions of practice are influenced to a great extent by others. At one time, it was strongly argued that the question of vaccination against smallpox was a matter for religion to decide, not the doctors. Even today, efforts are being made by certain segments of our population to direct the destinies of the medical profession.

It is my earnest hope that the medical profession will emerge from this defensive position—certainly not to exalt the profession—but to develop concrete, decisive, positive health and scientific programs under full realization of the morals of medicine as written in the Hippocratic Oath. No other profession has ever attempted to live under such a moral code.

Destiny in Medicine

It can be argued that doctors find it difficult, sometimes impossible, to take part in public affairs because of their responsibilities to their patients and their profession. Yet, in other countries you can find doctors in high public office. Of course, some stop their practice entirely, but others regulate it to the demands of their new office. Isn't it logical to say that whether or not they continue to practice, doctors bring to public offices an outlook and understanding that can come from nowhere else?

While doctors hold to their individualness, they also like to belong to organizations. Part of this belonging is undoubtedly inspired by the social and educational needs of the profession. But another part involves a belief that the medical profession has something of value to give to people in general through their organizations.

In the United States, physicians working together were instrumental in putting diploma mills out of business. They actively assisted in the development of Boards of Health throughout the country. Doctors have used their combined strength to further improvement in living standards, general welfare, public education, and human relations. Collectively, they have given the United States the best medical care that mankind has known.

In view of what has happened in other parts of the world, it was probably inevitable that government should be brought into closer contact with medicine. Socialistically-minded planners and politicians are advocating a federally-financed and controlled system of medical care. They are working on the false premises that it is our government's function to provide for the personal needs of all her citizens, and that the way to cure all ills, be they political or economic, is to appropriate enough money to some governmental bureau.

These planners are running into opposition, however. Two state governors have gone on record with their opinions of power concentrated in government. Missouri's James T. Blair said before the house intergovernmental relations subcommittee: "When the federal government enters a field, it writes all the rules. We do not need federal aid in Missouri. We have the local and state resources to meet our needs."

Indiana's Harold W. Handley, at the last governors' conference, made a resolution which protested against proposals to curtail self-government, to dominate the field of public health and welfare, and to extend federal government operations further into numerous areas of individual initiative and private enterprise.

One individual alone cannot defeat the efforts of others to regulate our lives. But one individual backed by others sharing the same faith in personal responsibility can work miracles. Collectively through our medical societies we have been able to make our influence felt.

But medical men singly are reputed to be poor business men and worse politicians. I think the reputation is fairly accurate. That is why, if we are to continue sharing with others the benefits of our specialized knowledge and viewpoint, we must stand united. We must keep alert to changes, not only in the interests of good medicine, but also in order to preserve the fundamental traditions, ethics, and principles which make good medicine possible here at home. What better example can we give the world.

53 national medical organizations belong to the World Medical Association. The strength of medicine as an influence for world peace lies in the strength of its constituent medical organizations, and the strength of any organization lies in the shared beliefs of its members.

Influence of War on Medicine

Doctors hate war because they hate anything that destroys human life. But they go to war because

sick and wounded have to be looked after. War conditions, while they stimulate medical progress, also disrupt the normal patterns of medical practice on the home front. In the history of the A.M.A. we have an example of the disrupting influence of war.

A note for the year 1863 reads like this:

"Early in 1861 the usual notices for the regular meeting were issued. Letters were received asking postponement until 1862. Just about that time, however, the battles of Fort Donelson and Shiloh occurred and most of the members of the medical profession were needed in the prosecution of the war."

The note for the year 1917 reads: "The war checks activity."

And in 1942, the note read: "Unfortunately, the needs of the war also interfered with several movements in process at the time when the war began. It has been impossible to create a committee to confer with specialty boards because the war has drawn so many of the important members of such agencies into the service."

Conclusion

Medicine has come through these disrupting times, however, stronger than ever, more fit for its important role in bringing peace in the world. There is still much to be done to overcome many obstacles, but I believe that through our unity our common objective will be heard above political belief, religious dogma, and geographical boundaries . . . strengthening the doctors of the world in their dedication to humanity.

Gundersen Clinic

AMA PLANS GROUP PRACTICE ROSTER

THE AMA'S COUNCIL on Medical Service has been in the process of compiling information on group practices throughout the country and eventually plans to publish a directory of these groups. To date, the Council has information on 989 such groups located in the United States, Hawaii, and Canada. Verification sheets have been sent out to those groups already on file. Physicians who practice in groups of two or more—who have not received a check sheet—are invited to send the following information to the Council: group practice name, address, office building (indicate whether rented or owned), number of physicians, and the specialties represented.

ALLERGY TO INSECT VENOM

Carl C. Jones, M.D. and Clarence L. Laws, M.D., *Atlanta*

Procedure for effective desensitization is outlined.

ALLERGY TO THE VENOM of the stinging insects (bee, wasp, hornet, yellow jacket, and ant) has been known since the earliest times. Although the first report was not recorded in the medical literature until 1811, since 1914 reports have been frequent.¹ It is normal and usual that our first reactions as children are manifested as moderately large areas of edema and soreness. However, as one continues to sustain insect stings through the years, he is usually desensitized naturally so that as adults single insect stings produce a much smaller and less painful local reaction. However, along this route, some people—the allergic or atopic more commonly—may show an “altered reaction” of a marked local swelling or systemic reactions manifested as asthma, urticaria and angioedema, or anaphylaxis, or combinations of these. The reactions may be severe and are occasionally fatal. The successive reactions tend to become more severe.

Classification

The animal kingdom consists of 22 Phyla, the largest of which is the Arthropoda—a word from the Greek meaning literally “jointed legs”—and, appropriately, Arthropods are characterized by their possession of jointed appendages. Among the many orders of this Phyla the Hymenoptera concern us. These are insects with two pairs of simply veined, transparent, membranous wings. This order is the only one containing insects which have a genuine stinger. This is a modified ovipositor of the female; no male insects therefore can sting.² These insects include the Potter Wasp (*Eumenes Fraternus*), the Paper Wasp (*Polistes Fuscatus*), the Hornet (*Dolichovespula Maculata*), and the Yellow Jacket (*Vespula Maculifrons*). An associated family of Apidae composing the bumble bee, the honey bee, and the

Formicidae, or ants, also possess stingers. Bees die after stinging but the others sting repeatedly. The venom is injected into certain insects (canker worms and spiders) which paralyzes them permanently and the insect eggs are laid upon this insect, in the insect home, to provide food for the developing larvae.

Biochemistry

Flury,³ Langer,⁴ and Lyssy⁵ have studied the chemistry of the bee venom. The material injected contains an indol derivative, probably tryptophane, choline, glycerol, phosphoric acid, palmitic and stearic acids, and a non-nitrogenous substance resembling saponin. Benson and Semenov⁶ state that the venom may contain (1) a histamine-like substance or a dermolysin releasing histamine locally from the skin, (2) a neurotoxin capable of causing extensive paralysis, (3) a hemorrhagin with a cytolytic effect on the endothelial cells causing increased permeability of the blood vessels, and (4) a hemolytic factor causing methemoglobin production. The venom is produced in two separate sacs, an “acid” sac and an “alkaline” sac, which merge at the base of the stinger. Occasionally, only one sac is injected by the sting and the proportions vary. The composition of the venom may also vary depending upon the insect food. The wasp food is largely protein and the bee food is nectar or honey. There is thought to be very little difference in the venoms.

Immunology

Immunological studies⁶ by gel diffusion and animal anaphylactic experiments have shown that these insects contain two common antigens and, in addition, each insect contains two to four antigens specific for the individual genus. Benson⁶ found little if any difference in reactivity between extracts made from the abdomen containing the sting sac and the anterior thorax and abdomen. However, Dr. Mary Loveless of New York City is attempting to demon-

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strate that the venom contains more specific antigens than the body protein in general. The amount of venom injected by the sting has been variously calculated from 0.0001 gram by Ross,⁸ to 0.05 cc. by Philsolex,⁹ and 0.3 cc. by Straus.¹⁰

Desensitization Technique

Desensitization to insect venom has been reported on several occasions.^{11, 12} This is accomplished by the serial injection every four to five days of a commercially available extract beginning with 1:1,000,000 dilution (0.02 cc.) progressing through 31 injections gradually increasing in strength to a 1:10 dilution of 0.4 cc. which should be equal to the amount of venom injected by an insect on a sting. This last dose is then repeated once a month for three years following which the desensitization or immunity is thought to be life long. Dr. Mary Loveless has recently demonstrated specific blocking antibodies after desensitization using sac venom. Inasmuch as there is considerable cross reaction clinically between the antigenic fractions of the Hymenoptera, one should skin test a patient with the separate venoms of the bee, wasp, and yellow jacket with 0.02 cc. of a 1:1,000,000 dilution. This is safe in our experience even in extremely sensitive patients. Desensitization should be carried out using a mixture of venom from those insects to which a positive skin test reaction is obtained.

Discussion

This report deals with our experiences with 20 patients who have had allergic reactions to the stinging insect venom. There were 14 males and six females varying in age from two years to 61 years. 15 of these 20 showed a positive family history of allergy and 19 of the 20 showed a past or present personal allergy on thorough questioning. There were ten cases in which wasp sensitivity was present clinically, ten with yellow jacket sensitivity, five with bee sensitivity, one with ant venom sensitivity, and seven mixed. Seven of the clinical reactions consisted of generalized urticaria and angioedema, twelve had experienced anaphylaxis with one showing a gastrointestinal reaction of nausea, vomiting, and diarrhea, and one showing a marked peripheral neuritis on the arm of the sting. The number of reactions varied from one to four in individual patients, being one in nine cases and two or more in the other eleven (four episodes occurred in one patient). These reactions had been experienced recurrently over an eight year period in one patient. In general, the people with multiple episodes had noted that they were becoming progressively more severe. One patient's initial episode consisted of brachial plexus neuritis in the arm on which the

patient was stung. This began a few hours after the sting and lasted three days during which narcotics were required constantly for the relief of severe pain. Several months elapsed before the complete abolition of all pain, however no sequelae are present. The mechanism of this neuritis is not known, but in view of the local swelling at the site of the sting, it is theorized that edema of the tissues at the intervertebral foramina could have caused compression of the nerves. The second clinical reaction by this patient consisted of generalized urticaria and angioedema accompanied by asthma and without any neuritis on this occasion. Another patient presented an interesting phenomenon resembling the Schwartzman. He was bitten one year prior to the acute episode by six insects (probably yellow jackets) without any systemic symptoms. Each bite, however, produced a large edematous area in which necrosis occurred and left a small scar when healed. These scar areas became swollen, reddened, and tender following his clinical episode of anaphylaxis produced by the bite of a single yellow jacket. These lesions became sensitive initially during his desensitization. Two other patients have given a history that the last bite by the offending insect prior to their acute allergic reaction left a scar. One patient was acutely sensitive to honey, experiencing anaphylaxis with even a taste. In addition, she experiences generalized urticaria after a bite by the "Bessie bug." Mrs. C. N. shows an excessively large local reaction to all insects, especially gnats. These bites remain as hard, integrated lesions which require months to heal, cover her legs, and flare up with each fresh gnat bite. Desensitization with a gnat extract has eliminated this reaction.

Treatment

The correct treatment of the acute episode should consist of epinephrine given in small doses (0.3 cc.) repeated as needed using different sites on the body subcutaneously. This same amount may be given intravenously if deep shock is present. Isuprel sublingual tablets 10 mg. were used by six patients who were stung during or after desensitization and undoubtedly were of great value in preventing a recurrence of the severe episode. It is advised that all patients carry these tablets with them at all times and that they be used immediately after being stung. A tablet may be repeated every five minutes as needed. Antihistamines by injection or orally are also helpful. The steroids are not thought to be of value in the acute, immediate episode, although they may be given at that time to relieve the urticaria, angioedema, or marked local edema which may develop during the succeeding hours and last for several days. These hormones should not be de-

pended upon to prevent the acute anaphylactic episodes.

Results

Six of these 20 patients under desensitization have been stung during or after desensitization by the responsible offending insect. All six have been protected or desensitized as shown by the absence of any subsequent systemic symptoms such as were originally manifested and only moderate local reactions were produced at the site of the sting. The process of desensitization has not caused any systemic symptoms or marked local reactions in any of the patients.

Conclusion

Hypersensitivity reactions to the venom of the stinging insects is occurring with increasing frequency and represents a medical emergency. This is a reversible disease process of great potential hazard for which a specific therapy is at hand. This consists of desensitization using a single or mixed extract. Desensitization has provided complete protection in all cases under treatment at the time of this report. In view of the excellent response to this treatment

it is recommended that all people with any hypersensitivity reaction, mild or severe, receive specific therapy.

1293 Peachtree St., N.E.

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PUBLIC'S HUNGER FOR MEDICAL NEWS

A MONUMENTAL NATIONWIDE STUDY, sponsored by the National Association of Science Writers and supported by a grant from the Rockefeller Foundation, strongly indicates that the American public has a big appetite for science news, especially medical.

But the surprising conclusion is that because of space limitations all "mass media are transmitting only a microscopic part of the mountainous supply of science information potentially available to them."

The study is entitled "The Public Impact of Science in the Mass Media." It was conducted by the Survey Research Center, Institute for Social Research, University of Michigan.

The preface of the 250-page study, just released, said that "the scientific journals of the world pour forth research papers at the rate of 20,000 a week. The science writer, as the middle man in the flow of communications, must select, condense, and translate from this fantastic deluge of information those items he is to transmit to the lay audiences of the mass media. In economic terms, it is not supply but demand that is the problem in the transaction."

Much of the study, which deals with nine specific

objectives, was concerned with medical news and the reading public.

The study revealed, for example:

1—Medical reading is more prevalent among women than men.

2—Medical reading increases with age, but there is a sudden drop in the group 65 and over.

3—The west leads in the percentage who read all medicine, and the south and northeast trail.

4—The science consumer (the reader or TV viewer) retains a lot of what he reads and hears.

5—Medical stories center around the major diseases.

6—Information that can be applied in everyday life is largely of the medical type.

7—Almost one third of the newspaper audience want more science news, and almost one half want more medical news.

8—The science consumer prefers to receive science and general news via the written media.

9—Based on newspaper readers only, 41 per cent reported that they read all medicine and health news, 35 per cent said they read some, 13 per cent said they glanced at it, and only 10 per cent said they skipped over it.

The wide usefulness of this instrument in diagnosis and therapy is outlined.

BRONCHOSCOPY IN THE CONTROL OF TRACHEO-BRONCHITIS

William C. Wansker, M.D., William A. Hopkins, M.D., and M. Bedford Davis, M.D., *Atlanta*

THE BRONCHOSCOPE generally has a dual function. First, it is a diagnostic instrument. With the aid of appropriate lenses one may visualize even the upper lobe orifices and their segmental divisions. Also, with various types of suction tips one may explore these bronchi and obtain specimens. It is usually possible to biopsy upper lobe lesions if appropriate anesthesia is used so that the area may be exposed.

The following pathological changes may be visualized by the use of the bronchoscope: lesions of the back of the tongue, the pyriform fossae, the epiglottis, the larynx, the pharyngoesophageal junction, and the larynx and its component anatomical parts. All of these may be inspected before the bronchoscope is inserted into the trachea. Of course, the trachea and bronchi are the target points of bronchoscopic visualization. One may note edema, erythema of the larynx, trachea, bronchial carinae, bronchial walls, and segmental bronchi. Ulcerations, tumors, foreign bodies, and areas of infection may also be seen. The exchange of air from individual segmental bronchial orifices may easily be determined. Broncho spasm, bronchial stenosis, and stricture formation may also be noted. Also, it is quite easy to localize sources of purulent discharge and, very occasionally, bleeding points. Edema is earliest visualized by loss of the posterior longitudinal rugae of the bronchial wall. At first these longitudinal wrinkles tend to disappear and flatten out. One later notes thickening of the bronchial walls and blunting of the main and secondary carinae. By the position of the segmental bronchi one may determine areas of atelectasis and areas of emphysema. One may note that the bronchi are displaced or

crowded together. Secretions from the tracheo-bronchial tree may be obtained for study by the bacteriological and pathological laboratories. Irrigation of the segmental bronchial orifices with one per cent ephedrine solution, which if then aspirated and saved, yields the best material for papanicolaou smears, and if this material be divided into two parts, the second aliquot may then be sent to the bacteriological laboratories for cultures. Bronchoscopically, one may predict with reasonable accuracy the pulmonary pathology present by observing the character and quantity of the bronchial secretions. The thick, tenacious, dry, jelly-like, glary, sticky mucoid material of the bronchitis of emphysema with large, pale, oversize, empty-appearing bronchi contrasts with the bloody, purulent appearance of the secretions of the bronchiectatic. The secretions of the latter are more numerous than those of the emphysema but cases of combined disease usually occur, and deeper suctioning of the tracheo-bronchial tree of the patient with emphysema and secondary function will reveal sputum not unlike that of the bronchiectatic. The bronchial walls of the bronchiectatic are reddened and granular. They bleed easily and pus may present itself in the larger bronchi or may be expressed from segmental orifices when the patient coughs. If these orifices are aspirated, purulent secretions may be obtained quite easily and the inside of these segmental bronchial walls may appear reddened, granular, and partially obstructed. Strictures may be evident and, occasionally, foreign bodies and tumors may be seen.

One may determine the mobility or fixation of the bronchial walls by the bronchoscope, thereby determining the presence of metastatic peribronchial or peritracheal nodes. The bronchial wall may be rigidly fixed externally by invasive tumor. One may some-

From the Department of Medical Education, St. Joseph's Infirmary, Atlanta. Presented before the 104th Annual Session, Medical Association of Georgia, Macon, April 27, 1958.

times visualize foreign bodies with difficulty because of surrounding infection, edema, and granulation tissue, and sometimes these foreign bodies may be quite easily seen. Within the last six months we have seen a portion of a tooth which had recently been extracted; several peanuts which have been aspirated by infants and children; and a sand burr which was seen several years ago causing obstruction and bronchiectasis distal. Less than three months ago we saw one patient with the X-ray appearance of far advanced cancer of the right lung with peribronchial invasion only to discover on bronchoscopy an imbedded chicken bone which, upon extraction, turned out to be the entire wish bone. There was no history of aspiration even when the patient was shown the chicken bone. The subsequent course has been quite satisfactory.

Congenital anomalies are occasionally easily determined by the bronchoscope. One may see the Sui bronchus superior to the right upper lobe bronchus which is a common bronchus in pigs and other mammals, but which is rarely present in man. This bronchus may lead to a bronchiectatic lobe. Atretic lobes or segments may also be identified. Under diagnostic function one must consider the biopsy function of the bronchoscope whereby primary tumors of the major bronchi may be seen and portions of these may be removed for pathological examination. One may determine invasion of the bronchial walls proximal to the tumor and may also determine invasion of the main carina of the trachea proximal to the tumor to determine resectability. Biopsy of an ulcerative lesion helps to rule out acid fast infection fungus lesions or acute ulcerations.

Therapeutic Effects

The second function of the bronchoscope falls into the heading of therapeutic effects. One of the most common indications for bronchoscopy is the retained pulmonary secretions in the post-operative patient. With lavage one promotes better drainage, and the removal of mucous plugs allows re-expansion of atelectatic segments.

Expectorant Effect

An additional effect of the bronchoscope is its expectorant effect. Normally, the tracheo-bronchial secretions are controlled by the sympathetic and parasympathetic nervous systems. The secretions of the parasympathetic system are thinner than those of the sympathetic controlled glands.

It is noteworthy that in many disease states the bronchial secretions become thickened and tenacious. The bronchial peristalsis as well as ciliary action is unable to expel this foreign material. Usually in an ill patient, the cough reflex itself is dulled and this allows for stagnation of the secretions with resultant

increase of infection.

Aspiration of the mucous plugs, lavage of the thick secretions, and the thinning of the broncho pulmonary secretions by the therapeutic expectorant effect of the bronchoscope will allow these secretions to become quite thin and more easily expectorated. One notes in particular the advantage of this procedure on the treatment of lung abscess. Here, a patient who may be quite ill and febrile even though on antibiotic therapy may suddenly begin to drain large volumes of purulent material following a bronchoscopy. Shortly thereafter, his clinical course improves remarkably. It is advisable in many of these cases to perform bronchoscopy at least twice a week.

If the bronchiectatic secretions remain in the bronchi affected by this disease, three changes occur. (1) The character of the bronchial wall is changed so that ciliary action does not occur. Microscopically, this is easily demonstrated because the mucosa is destroyed and may be replaced by squamous epithelium or by a layer of fibrous tissue. (2) The bronchial walls are thickened and fibrotic, thereby no longer permitting bronchial peristalsis. (3) The sensitivity of the bronchial walls to the presence of a foreign body such as mucopurulent secretions and thickened bronchial plugs is dulled so that the patient does not realize that secretions are present in his lungs. Therefore, with the cough reflex dulled and an ineffective cough, at best the patient coughs only when the secretions are so plentiful that they overflow into more sensitive areas.

Bronchoscopy will remove the secretions and will allow drainage of the diseased segments as well as drainage of functioning but infected parts of the lung. The patient may be prepared for bronchographic studies by bronchoscopy and the affected areas mapped out. Usually, in severe cases it is necessary to repeat bronchoscopic aspirations until the tracheo-bronchial tree is clean. Only when this state occurs is he then ready to undergo resectional therapy.

Bronchoscope in the Emphysema Patient

In the emphysema patient the bronchoscope is of considerable value in both the acute and chronic stages. In the emphysematous patient with acute infection the bronchoscope is of great value after he has been on chemotherapy for several days because it removes retained secretions and thick plugs. This allows drainage of purulent material blocked behind the plugs and, very shortly, bronchospasm is relieved and ventilation is improved. In the chronic stage the bronchoscope removes the thick, glary, mucoid material which is so characteristic of this disease and the patient is then able to move air in and out of his previously obstructed air ways. The change in the secretions to a thin, watery type of material in the

BRONCHOSCOPY / Wansker

three previously mentioned conditions contributes greatly to better drainage.

In acute viral infection there is usually very little indication for bronchoscopy except as a diagnostic procedure because these infections may occasionally mimic other diseases. However, many viral invasions are followed by secondary bacterial infections which may become very resistant to chemotherapy, expectorants, and treatment with the intermittent positive pressure breathing machines. In these situations one finds that the bronchoscopic removal of secretions and the promotion of drainage by thinning of the bronchial secretions combined with coverage of antibiotics will occasionally be very effective.

Bronchitis due to the exposure of the tracheo-bronchial tree to noxious substances such as cigarette smoking, automobile exhaust, or other forms of air pollution will frequently lend itself well to bronchoscopic diagnosis and treatment. We see many smokers who are admitted because of pulmonary bleeding. When the tracheo-bronchial tree is examined, one notes a rather foul odor, sees reddening of the bronchial walls, a granular appearance, and friability. When the bronchoscope touches these structures they tend to bleed. Muco-purulent secretions are present and are easily aspirated. Bronchospasm is present because the tracheo-bronchial tree is highly irritated. Again the removal of thick, mucoid material and the thinning of the bronchial secretions tend to promote drainage with subsequent clearing of the infection.

Coverage with antibiotics, abstinence from irritation, and, occasionally, treatment with the intermittent positive pressure breathing machines will frequently result in a reversal of the process, but many patients are so far advanced when seen that persistent bronchospasm rales and low grade indolent infection may remain in the affected areas for a very long time.

Bronchitis Present in Allergic Conditions

The treatment of bronchitis present in allergic conditions is not usually satisfactory. However, a promotion of drainage, which in itself lends to reduction of areas of infection, may sometimes break the cycle of infection, allergy, bronchospasm, mucous plugs, and re-infection. Of course, removal of obstructing foreign bodies will allow drainage and clearing up of infection.

The bronchoscopic treatment of granulomatous disease of the tracheo-bronchial tree is not frequently carried out now days, especially since the onset of anti-tuberculosis therapy. Usually, the fungus infections are present in the periphery of the lung fields and these are particularly amenable to resection therapy when indicated.

Bronchoscopic aspiration of the thickened abnormal secretions of muco-viscidosis is temporarily helpful but, unfortunately, benefit is short lived and occasionally it may be quite dangerous.

Bronchitis in "Croup"

In the child with acute laryngo tracheo-bronchitis and far advanced subglottic edema usually called "croup," bronchoscopy has a very specific technical function. In the child with far advanced obstruction who is tired, respirating poorly, and retracting markedly, the insertion of a bronchoscope through the larynx will provide an air way which will allow the child to immediately become well oxygenated and he will usually fall asleep. If a bronchoscope is not available, the insertion of an endotracheal tube will perform this function. The second function is to technically assist the operative procedure of tracheotomy. It does two things: It allows an air way; and it allows one to easily identify the trachea. This can be a real operative problem in a struggling baby.

One rarely spends the time to inspect the tracheo-bronchial tree in a case of acute croup, although if he does this, occasionally the observer will notice a very glary, edematous, boggy-looking mucosa which extends from the larynx to the smallest of the segmental bronchi. Secretions may be thick and occasionally one will remove a large lump of thick mucoid material.

The tracheotomy tube is inserted as the bronchoscope is removed and the procedure is then terminated. Following this, the child usually improves rapidly. The remainder of his course usually depends on the amount of pulmonary parenchymal infection.

Bronchoscopy on the Average Adult

Bronchoscopy may be carried out on the average adult either under local anesthesia (and this is actually a topical type of anesthesia), or as is done mainly in this city, under general anesthesia using a muscle relaxing agent as well as a topical anesthesia to the vocal cords. In our hands, at least, it has been equally as safe as local and is much more comfortable. In this manner one may also obtain a quiet field in which to work so that adequate visualization of all anatomical structures may be carried out. The anesthesia can be so nicely controlled that prior to termination of the bronchoscopy, if one wishes the patient to cough, he usually will do so and thereby expel any retained secretions so that they may be removed with the suction tip.

The patients are usually out of bed the afternoon of bronchoscopy and usually eating a regular diet for supper. They complain the next day of a very mild soreness in the throat and sometimes soreness in the upper abdominal muscles and across the chest. Many go home the day after bronchoscopy.

1293 Peachtree St., N.E.

PSYCHIATRIC INTENSIVE TREATMENT PROGRAM IN GENERAL HOSPITALS

Trawick H. Stubbs, M.D., M.P.H., *Atlanta**

GROWTH AND CHANGE are characteristics of life. We are constantly growing in our attitudes about mental health and in our programs for helping persons who are mentally ill. Three different ideas, all of them important, have been discussed in connection with the program of the Georgia Department of Public Health, which is now referred to as the Intensive Treatment Program. These three ideas are (1) screening total populations for early case-finding and treatment for mental illness, similar to methods which are used for screening total populations for early diagnosis of diabetes or tuberculosis; (2) utilization of general hospitals for the treatment of mental illness, just as they are utilized for the treatment of other illnesses, with emphasis on providing services for individuals close to their homes; and (3) the development of regional mental hospitals, rather than having one large central mental hospital in our state.

It is important at the outset to make it clear that the present program is concerned only with the second of the above three ideas—that is, intensive treatment in general hospitals. The program is operating on a pilot project basis, utilizing special funds provided by the Governor, beginning July 1, 1957 for a two-year period, in the amount of \$300,000 per year. The State Health Department administers funds for the purchase of services from hospitals and from professional personnel.

Without quibbling over exact definitions and diagnostic criteria, I think we can agree that some people are now being committed to the State Hospital who could be helped by a few weeks of intensive treatment in a psychiatric service of a general hospital. It is this particular group that is served by

the Intensive Treatment Program. It is hoped that within a two-year period we can demonstrate some of the values in this approach for meeting the challenge of mental illness.

Selection of persons to benefit from this program begins with referral by their own family physician. At present, the patient must voluntarily agree to go, although recent legislation which will become effective July 1st will probably permit involuntary hospitalization in general hospitals without depriving patients of their rights. A discussion of some of the procedures involved on the program is available to each of you in the April, 1958 issue of *Georgia's Health*. Briefly we might say that the local health department has responsibility and authority for processing applications, based on requests from a physician or other medical source, with consultation by a psychiatrist, at least by telephone. The patient must require hospitalization, and there must be assurance of expected benefit from a few weeks in the hospital.

Economic Eligibility

Decision on economic eligibility is left to the local health department, on the basis that situations vary in different counties. The health officer is free to call on local medical societies, welfare departments, or other sources for advising him on interpreting whether or not the family is able to pay for the hospital cost. So far, we have found it wise not to make provision for accepting part payment from a patient. It is possible, of course, for a patient to pay for some of his expenses in connection with an illness and still be declared eligible, but we do not mix up the two things administratively.

Since this is a program in which tax funds are used to purchase hospital and professional services for citizens of the state, the actual delivery of service depends upon the facilities in the general hospitals.

*Director, Division of Mental Health, Georgia Department of Public Health. Presented at 104th Annual Session, Medical Association of Georgia, Macon, April 27, 1958.

PSYCHIATRIC PROGRAM / Stubbs

We feel that the beneficial effects of the program will be twofold, since in addition to the help afforded individuals in need, the program encourages more rapid development of adequate psychiatric services in general hospitals. These services will also be available to other citizens who can pay for services themselves, or from insurance or other sources.

The ability of hospitals to develop adequate psychiatric services depends upon several factors. I might say that our present concept of adequate psychiatric services in a general hospital involves a separate service headed by a board certified psychiatrist, and including also adequate professional services in the fields of nursing, psychology, and psychiatric social work, and in addition, appropriate occupational therapy and vocational rehabilitation services for all patients on the program who need them. The ability of a hospital or a community to attract psychiatrists to their community involves to a considerable extent the feelings and attitudes of the local medical group and individual physicians.

Since this is true, we look for opportunities in the relationship between the medical speciality of psychiatry and general practice of medicine, and in the feeling of individual psychiatrists and family physicians about the relative roles filled by each. This meeting today exemplifies the growth process in which we are involved in terms of these relationships, and portends increasingly close cooperation and mutual respect during the months and years ahead between these two important groups as you share your joint responsibility for serving the mentally ill.

Relationships between psychiatry and other branches of medical practice reflect to some extent the prevailing attitudes, beliefs, and concepts in our general culture and society. It would be unrealistic if we were not aware of several different kinds of feelings about mental health and psychiatry. While our people have a tremendous enthusiasm, which at times includes magical thinking and expectations about what psychiatry and mental health programs have to offer us, there is at the same time a fear of what psychiatry and psychology can do to people, and a reaction against the mental health movement which is not to be taken too lightly. This general mixture of feelings in our culture has its counterparts among those of us who are professional people as well as citizens. I have a personal conviction that public agencies can so operate programs for which they are responsible as to show respect for a great variety of different opinions and feelings among the people they serve and among the professional persons and agencies who share in the service program.

We can think of wholesome differences of opinion as growth promoting factors—rather than as conflicts involving ill will. Honest expressions of differences contribute to a more solid basis of mutuality in our joint enterprises.

Whether the differences may be between the growth processes of hospitals in relationship to private medical practice, or of general health programs in relationship to mental health programs, or of agencies in relationship to one another, differences can be used for growth toward mutuality, as long as we keep in mind our major responsibility for utilizing our total resources to meet the needs of the persons we serve.

We can realistically be aware of the growing pains represented in the complex of social forces in our professional activities without becoming discouraged, without losing our sense of humor, and without becoming involved in ill-will. All of us are involved in our own feelings and attitudes as persons as well as in our efforts to fill effectively the professional roles we represent. We all want to do what we are “supposed to do,” but we have a right constantly to question who does that “supposing”. All of us are involved in numerous different considerations. For example, there are same theories of common interest between all professional people who engage in individual practice as contrasted with those of us who work on a salary, regardless of our professional training. On the other hand, there are areas in common among those of us who have similar professional training, regardless of whether or not we are in private practice or work for a salary for some department or agency. The fact that each of us has multiple loyalties makes it more likely that we can find ways to make the best possible combined contribution.

Economic Considerations

In the area of economic considerations there are various expectations for a program of this type. Some people feel that its chief justification is the promise it holds for saving total tax dollars. Personally, I do not believe the total dollars spent will be less. On the contrary, increasing availability of services will call for increasing cost. However, I am convinced that programs of the type we are discussing here will save much by getting more returns for each dollar spent. Moreover, the benefits will exceed the immediate improvements for each patient. One of the greatest benefits will be in terms of the changing attitudes and patterns of service for persons who behave in such a way that we label them mentally ill. While we are on the subject of economics, it is interesting to note the differences in plans for operating mental health programs as compared with general health programs. I think some of these differences

can be understood in terms of historical perspective, particularly with the traditional responsibility state governments have carried in the case of the mentally ill. On this program state tax funds without any local matching dollars are used for payment of both hospitalization costs and professional fees. In contrast, for example, the general Hospital Care Council program which is coming into being anticipate a matching formula for joint utilization of state and local tax dollars, without any tax funds being used for professional fees. Such differences as these make sense when viewed in perspective. And viewing in perspective means looking forward to the changes which represent desirable growth as well as looking back to the antecedents of our present practices.

After having been away from Georgia for some 10 years, it is a matter of considerable pride to me to realize in how many ways we are offering leadership in this state. The history of mutual respect between public programs and organized medicine in this state is one that we are all proud of.

One of the important aspects of this Intensive Treatment Program will be the opportunities it offers for increasing the communications between psychiatrists and family physicians in terms of their joint concern for the needs of individuals and families.

My personal feeling is that the learning and growing that we do together as professional persons is a multi-directional thing that specialists in hospitals have much to learn from physicians who knows the local situations, just as these physicians have much to learn from the specialists in the larger medical centers. It is our hope that this Intensive Treatment Program will serve both groups effectively in their efforts to communicate with one another for the benefits of their own professional growth and the benefits of the persons they serve. We have a long road ahead but we are traveling it effectively together.

While we welcome honest differences of opinion, we still keep our eyes upon our joint responsibility for utilizing most effectively our total resources for meeting the total needs of our citizens. This can be done while still giving appropriate emphasis to the realization of individual capacities each one of us has for making his particular contribution in his own way and through the channels open to him. Thus, a program like the Intensive Treatment Program will be of benefit not only to the persons it serves but to people such as we in our continuing effort to help one another learn and grow as professional people and as persons.

12 Capitol Square

AMA RE-ORGANIZATION PLANS

A FIRST STEP in the American Medical Association's broad re-organization plans was reviewed and approved by the Board of Trustees, meeting in Chicago during August.

The purpose was to streamline AMA's administrative set-up. No changes were made that require changes in the constitution and by-laws. Nor were the relationships between the standing committees and the Board of Trustees or House of Delegates disturbed. Program content also remains the same for the time being.

Six new divisions were established: Business, Law, Communications (professional and public relation), Field Service, Scientific Publications (editorial), and Council Administration. The last division is temporary, pending further study of the scientific and socio-economic activities of the Association. The directors of the divisions are, respectively, Russell H. Clark, C. Joseph Stetler, Leo E. Brown, Aubrey Gates, Dr. Austin Smith, and Dr.

Ernest B. Howard, assistant executive vice president, who will administer the temporary division in addition to acting as deputy on other matters.

Important administrative realignments include: (1) the transfer of *AMA News* and *Today's Health* editorial functions to the Communications Division, and (2) centralization of all advertising, circulation, and printing activities in the Business Division.

New positions established and filled are the office of assistant to the executive vice president (Tom Hendricks) and director, Field Service Division (Aubrey Gates).

The over-all legislative program, including the Washington Office, Committee on Legislation, and related field activities will be reviewed by a special committee of trustees and delegates appointed at the August 2 meeting of the Board. The existing organization pattern for legislative activities will be continued until this special committee reports its recommendations to the Board.

This time proven adjunct in the treatment of hypertension should be considered in cases refractory to or unsuitable for medical therapy before they progress to an irreversible hopeless condition.

LUMBODORSAL SPLANCHNICECTOMY IN THE TREATMENT OF ESSENTIAL HYPERTENSION

G. P. Whitelaw, M.D. and R. H. Smithwick, *Boston, Massachusetts*

PRESENTATIONS AND DISCUSSIONS of the results obtained in the surgical treatment of hypertension usually resolve themselves into comparative statistics between medically, or non-surgically, treated cases and those treated by surgical methods. Blood pressure, cardiovascular changes, and mortality statistics have been selected usually for comparative analysis in any series. Many authors prefer to compare mortality rates as it has been generally agreed that these figures are incontrovertible when a high percent of the cases have been accurately followed. Hence, if a given series is followed for a sufficient time and the fate of a high percentage of the cases known, survival statistics would seem to offer a reasonable chance of deducing the relative merits of various types of treatment.

However, on examining the literature, the difficulties of assessing the results of a certain type of therapy and comparing it with another method immediately becomes obvious. The reasons for this are: (1) Insufficient data in the study of the cases to place them in groups of comparable severity. It is manifestly useless to compare the treatment of a series that contains a majority of cases with severe hypertension and advanced cardiovascular changes with a series containing a minority of such cases. When one sees various series varying from 17 to 91 per cent mortality for similar follow-up periods, one can be sure that the series do not contain cases in the same stage of the disease, i.e., they are just not talking about the same problem. (2) Another reason for the difficulty in comparing various series is the lack of sufficient number of cases to allow any valid conclusion. (3)

Also, the lack of sufficient time of follow-up is notable in many series so that no conclusion as to the efficacy of treatment can be drawn. In our opinion, series showing follow-up of one to 12 years, or equally divergent intervals, usually are meaningless. (4) In addition, the lack of consistency of treatment in many series renders comparison invalid, particularly in evaluating statistically relative merits of surgically treated cases with those treated by non-surgical or medical methods. As is well known, medical treatment of hypertension has changed radically while making the rapid forward strides that it has during the past ten years. Hence, there is no medically treated series of which we are aware in which the cases have been studied and treated in a standard fashion, followed sufficient time, and are of sufficient number to allow for any valid conclusions. On the other hand, there can be little doubt in anyone's mind that medical treatment today, utilizing the newer drug combinations and dietary measures, is extremely efficacious when used properly and that the mortality rates in patients treated medically are vastly lower than even five years ago.

Modern medical therapy cannot, therefore, be compared with surgical treatment, as no such figures are available. I would rather like to emphasize that each method is extremely valuable in its proper place, and no rivalry between the two methods should exist. They should, rather, complement one another in a fashion similar to cooperative therapy in such conditions as duodenal ulcer and thyroid disease.

One of us (RHS) first became interested in this problem in 1935 and developed the operation in 1938 as we use it today. This is called the lumbodorsal splanchnicectomy. The only change during that time is that we now perform the operation in one stage, i.e. both sides at the same time, rather than as formerly in two stages, approximately ten

From the Department of Surgery, Massachusetts Memorial Hospitals and The Boston University School of Medicine, Boston, Massachusetts. Presented before the 104th Annual Session, Medical Association of Georgia, Macon, April 27, 1958.

days apart. 4,450 patients have been similarly studied during this time and placed into groups according to the severity of their disease. 1,669 have been treated medically and 2,781 surgically. We do not propose to present a statistical analysis of this series. The results of treatment of these cases have been previously reported.^{1, 2}

The neurogenic variety or so-called essential hypertension makes up, in our estimation, approximately 96 per cent of the cases (Table 1) as seen in the doctor's office. We usually have regarded intermittent hypertension of the essential variety as a rather benign disease. Careful follow-up studies show, however, that these individuals may progress to cardiovascular involvement in a considerable number of cases and must be followed with as much care as those with continuous hypertension. Generally speaking, patients with intermittent hypertension run a fairly benign course and can be well controlled by medical means. Our series of essential hypertension treated by lumbodorsal splanchnicectomy are made up almost exclusively of patients with continuous hypertension.

The subject of humoral hypertension deserves mention as the spectacular results obtained in the treatment of these cases is becoming of increasing interest. As a result of Conn, in 1956³ calling attention to primary aldosteronism and the associated diagnostic features and the stimulation given to the diagnosis of unilateral renal disease by the Howard test,⁴ more vigorous approach has been taken in the discovery of cases of hypertension based on humoral factors. Even though these patients constitute only a small percentage of the entire hypertensive group, they must be continually kept in mind.

Coarctation of the aorta, though relatively infrequent, must be sought for and ruled out by careful blood pressure determinations of the upper and lower extremities as well as study of the chest film for nicking of the ribs or changes in the aortic arch.

ABOUT THE AUTHOR

George P. Whitelaw, M.D. of Boston, Mass. graduated from Yale College in 1931 and from Harvard Medical School in 1935. He is at present engaged in the private practice of general surgery in Boston and is an associate professor of surgery at the Boston University School of Medicine. Dr. Whitelaw is also director of graduate training in surgery, Massachusetts Memorial Hospitals, and an assistant of the surgical teaching program, Boston University School of Medicine.



TABLE 1
Hypertension

1. Neurogenic — 96+ % (estimate)
(a) So Called Essential
1. Normotensive hyperreactor
2. Intermittent hypertension
3. Continuous hypertension
(b) Malignant
2. Humoral — 2+ % (estimate)
(a) Adrenal Cortical
1. Primary Aldosteronism
2. Cushing's Disease
(b) Adrenal Medulla
Pheochromocytoma
(c) Unilateral Renal Disease
3. Mechanical — Less than 1% (estimate)
Coarctation of Aorta

Routine Methods of Study

Since 1938, these patients have been studied in routine fashion, as shown in Table 2. In recent years the special tests have been added, as indicated in an attempt to diagnose the cases with humoral factors as the etiological mechanism for their disease. Patients who present themselves with high blood pressure must be evaluated thoroughly, so that curable forms of the disease may be recognized and an accurate estimate be made of the cardiovascular status of patients with essential or malignant hypertension. In this way, patients with severe and progressive cardiovascular disease will not be denied the benefits of maximum treatment. A detailed history and physical examination should be made and data should be recorded regarding the cerebral, cardiac, and renal areas. The cardiac status is determined by an electrocardiogram and a seven-foot heart roentgenogram, with particular reference to the size and shape of the heart and the state of the aorta. In patients with significant degrees of tachycardia or those with angina pectoris, Master's two-step exercise test is used for further appraisal of the cardiac situation. The status of the kidneys is evaluated by urinalysis, a 12-hour concentration test, and an intravenous phenolsulfonphthalein test. In the latter, the dye is injected after a period of forced fluid intake and specimens are collected at intervals of 15 and 30 minutes and of one and two hours. This simple test of renal function has been found very useful in estimating the extent of renal damage in hypertensive patients and is the one upon which we place the most reliance. A serum non-protein nitrogen determination is also made.

The blood pressure responses of the patient are measured (1) under change of posture with the

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added stimulation of cold, and (2) under sedation. The posture-cold test is performed as follows: Ambulatory readings are taken as soon as possible after admission to the hospital. After at least 48 hours of bed rest, except for lavatory privileges, the resting values are recorded. The test can also be carried out routinely on an ambulatory basis in the office, preferably by a technician rather than the physician, since the physician often acts as a pressor stimulus to the patient. Preliminary readings of blood pressure are taken on each arm. If no great discrepancy exists, the right arm is used. If there is a marked difference between the two sides, repeated checks

TABLE 2
Routine Methods of Study

1. History	
2. Physical Examination	
3. Eyegrounds—Grades 0, 1, 2, 3, and 4	
4. Cardiac Status	
(a) Electrocardiogram	
(b) 7-foot heart plate	
5. Renal Study	
(a) Routine urinalysis with detailed microscopic exam.	
(b) Intravenous pyelogram	
(c) I.V. PSP test—collect specimens at 15, 30, 60, and 120 min.	
(d) Blood urea nitrogen	
6. Postural and Cold Test	
7. Sedation Test	
8. Blood Studies	
(a) RBC, Hct., WBC & Differential	
(b) Hinton	
(c) Blood sugar (not fasting)	Screening tests for: Pheochromocytoma, Aldosteronism & Cushing's syndrome
(d) Serum chloride, CO ₂ , K, Na	
(e) Cholesterol	
9. Special Tests As Indicated	
(a) Howard test	
(b) Regitine test	
(c) Catechol amines (24-hr. urine collection)	
(d) Corticoid excretion studies	
(Levels of Urinary 17-Hydroxycorticoids & 17-Ketosteroids before and after ACTH)	

are made and the arm with the higher reading is selected. The test is explained to the patient and after an additional rest period of 15 to 20 minutes

in the horizontal position, observations are begun. It is essential that the environment be quiet and comfortable.

Pulse and blood pressure readings are taken every minute for five minutes with the patient first lying and then standing. With the patient again horizontal, three more blood pressure readings are taken at two-minute intervals. Then the opposite hand is immersed up to the wrist in ice water at 4° to 5° C. for exactly one minute. Blood pressure readings are taken after 30 seconds and at the end of 60 seconds of stimulation by cold. Readings are continued at two-minute intervals for an additional three readings. The patient then assumes the upright position and after three preliminary readings at two-minute intervals, the cold stimulus is repeated exactly as in the horizontal position. This is followed by three additional readings at two-minute intervals. The average of the first five readings in the horizontal position during the first portion of the posture-cold blood pressure test is regarded as the resting blood-pressure level. The diastolic readings are considered the more important.

The sedative test is performed in all patients who are hospitalized. Following a light supper, three grains of sodium amytal are given by mouth at 7:00, 8:00, and 9:00 P.M. Hourly readings of pulse and blood pressure are recorded from 7:00 P.M. to 7:00 A.M. The lowest reading of systolic and diastolic blood pressure is taken as the response. This is evaluated by comparison with the average horizontal resting blood-pressure level as determined by the posture-cold test, the diastolic response being the more significant. To be regarded as satisfactory, the diastolic level during the sedative test should fall to 90 mm. or less in patients with resting diastolic levels between 100 and 119 mm. of mercury. In patients with resting diastolic levels between 120 and 139, the sedation response should be a fall to 100 mm. or less. In those with resting diastolic levels of 140 mm. or more, the diastolic level should fall to 110 mm. or less. Otherwise, the response to sedation is regarded as unsatisfactory.

The presence of postural hypotension may be a clue to the diagnosis of hypertension based on a humoral factor and alerts one to further studies. Figure 1 illustrates the importance of taking blood pressures in the lying and standing positions to determine the presence of postural hypotension. In studying 100 cases of essential hypertension and 37 cases of humoral hypertension, it was found that only 26 per cent of the cases of essential hypertension showed a postural drop, whereas 81 per cent of the cases of hypertension based on humoral factors showed a drop in blood pressure when changing from the lying to the standing position. This phenom-

enon has been discussed before in relation to cases of pheochromocytoma.

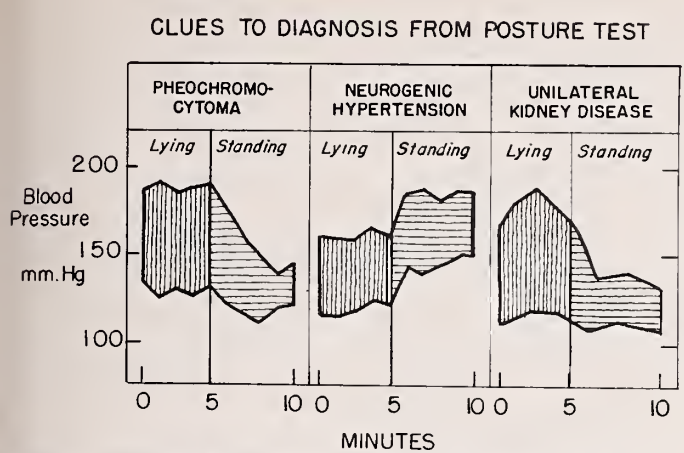


Figure 1: Postural hypotension shown in pheochromocytoma and unilateral renal disease as contrasted to reflex hypertension when changing from the lying to standing position in neurogenic forms of hypertension.

The usual routine blood studies are carried out in addition to blood sugar and electrolyte determinations of serum chloride, CO₂, potassium, and sodium. These latter may be of extreme importance in also giving a clue to the presence of adrenal cortical abnormality. Corticoid excretion studies have been helpful in a few cases of adrenal cortical abnormalities but from the practical standpoint the results of these studies may be so delayed in being reported that the diagnosis is made from other criteria. As far as we know, the Howard test for unilateral renal disease has never been falsely positive when performed properly. The regitine test and determination of catechol amines for pheochromocytoma have given false positive and false negative reactions but are, nevertheless, considered helpful. We have utilized the Master's two-step exercise test in a large number of cases to aid in better evaluation of electrocardiogram abnormalities as well as for the evaluation of tachycardia on an emotional or exertional basis.

Method of Grouping

Following the complete work-up, the patients are classified into groups. It has been pointed out many times that the prognosis for a hypertensive patient varies according to the status of his cardiovascular system when first examined.⁵ Unless patients with similar degrees of hypertension and of cardiovascular involvement are placed in comparable groups, there is no basis for the comparison of results of treatment. A study of the literature reveals that the mortality rates for different groups of patients who have not been operated on varies tremendously—from 17 to 91 per cent.⁶ This is largely a matter of classification of patients. Since there are many factors which influence prognosis, we have attempted to control as many as possible by adopting the plan described here, devised by one of us (RHS), which we have used for many years. This system makes the

clinical material in each group as comparable as possible and is the best that we have been able to formulate with the number of patients we have studied. The various factors which have a bearing on prognosis are listed in Table 3, a numerical value being assigned to each. In any given patient the existing factors are totaled, resulting in the numerical grade for the patient (Table 4). The patients are then placed in four groups. If the numerical grade is less than four, the patient is in Group I or II. If the numerical grade is four or more, the patient is in Group III or IV. The additional factors that determine the exact group of the patient are given in Table 5. Patients in Group I have the least severe

TABLE 3
Numerical Values of Various Factors which Influence Prognosis

	Numerical value of each factor
Age 50 or over.....	1
Cerebrovascular accident, with or without minor residual.....	
Abnormal ECG.....	
Enlarged heart.....	
Impeding congestive failure.....	
Mild angina.....	
P.S.P.* less than 25% in 15 min., or less than 60% in 2 hrs.....	2
Cerebrovascular accident, with residual**.....	
Frank congestive failure, moderate angina.....	
P.S.P.* less than 20% in 15 min.....	
Unsatisfactory response to sedation.....	
P.S.P.* less than 15% in 15 min.....	3
Nitrogen retention.....	4

*Phenolsulfonphthalein concentration in urine.
**Cerebral deterioration or definite involvement of arm and/or leg.

cardiovascular disease, whereas those in Group IV have the most severe degree of cardiovascular damage.

It should be pointed out that the patients under

TABLE 4
Two Examples of Method for Determining Numerical Grade of Hypertensive Patients

Factors considered	Numerical value
Example 1	
Abnormal ECG.....	1
Cerebrovascular accident without residual.....	1
P.S.P.*—20% in 15 min.....	1
(Total).....	3—Numerical grade
Example 2	
Abnormal ECG.....	1
Enlarged heart.....	1
P.S.P.*—10% in 15 min.....	3
(Total).....	5—Numerical grade

*Phenolsulfonphthalein concentration in urine.

discussion all had continuous hypertension, not the intermittent variety. The blood pressure in the

Lumbodorsal Splanchnicectomy / Whitlaw

resting horizontal position after two days of bed rest in the hospital was 140/90 mm. of mercury or more. These patients had advanced through the earlier stages of the natural history of hypertension, i.e., hyper-reactivity of the blood pressure without hypertension, and intermittent hypertension brought on by various stimuli, and therefore represented unusually severe forms of the disorder. They did not fall into that group of patients with hypertension who tolerate it well and may have long useful lives without any treatment. When first seen, the great majority (88 per cent) of our patients had manifest vascular disease either in the eyes, heart, kidney, or brain and were, therefore, in the stage of hypertension when cardiovascular complications had begun to occur.

TABLE 5
Classification of Hypertensive Patients
Criteria for Grouping

Group	Numerical grade	Other Factors
1	Less than 4	Eyegrounds, grade 0 or 1. No changes in cerebral, cardiac, or renal areas.
2	Less than 4	Eyegrounds, grade 0 or 1, with changes in cerebral, cardiac and/or renal areas. Eyegrounds grade 2, 3, or 4, with or without changes in cerebral, cardiac, or renal areas.
3	4 or more	Resting diastolic level of B.P. below 140 mm. Changes in cerebral, cardiac, and/or renal areas do not include the following: (a) C.V.A. with marked residual. (b) Frank congestive failure. (c) P.S.P. below 15% in 15 min., associated with a poor response to sedation.
4	4 or more	Resting diastolic level of B.P. below 140 mm., combined with one or more of the following: (a) C.V.A. with marked residual. (b) Frank congestive failure. (c) P.S.P. below 15% in 15 min., combined with a poor response to sedation. Resting diastolic level of B.P. of 140 mm. or more.

The surgical measures available for the treatment of hypertension are listed in Table 6. The first operation, known as the thoracolumbar or dorsolumbar splanchnicectomy will be described presently in slightly more detail and is the maneuver which has been employed most commonly in the treatment of essential or malignant hypertension. Approximately seven per cent of surgically treated patients in this series underwent transthoracic sympathectomy and splanchnicectomy because of coronary artery disease and angina pectoris associated with hypertension, or severe exertional, emotional, or postural tachy-

cardia associated with hypertension. We have treated a few patients with severe essential hypertension and a few cases with malignant hypertension by adding subtotal adrenalectomy to the splanchnicectomy. We have had a few good results. For the most part, cases selected for this procedure have not done well. They were all in advanced stages of the disease.

TABLE 6
Surgical Measures in Hypertension

1. Thoracolumbar sympathectomy and splanchnicectomy
2. Transthoracic sympathectomy and splanchnicectomy
3. Unilateral nephrectomy:
 - (a) Renal Artery disease (Goldblatt kidney)
 - (b) Parenchymal disease (e.g. Pyelonephritis)
4. Removal of adrenal tumors;
 - (a) Pheochromocytoma
 - (b) Cortical adenoma
5. Subtotal adrenalectomy:
 - (a) Cushing's syndrome
 - (b) Essential or malignant hypertension (selected severe cases)

In the lumbodorsal splanchnicectomy the sympathetic trunks are removed bilaterally from D₈ through L₁ inclusive, together with the greater, lesser, and least splanchnic nerves. The adrenal glands and kidneys are always carefully explored at the time of operation which is usually a one-stage procedure. It is our feeling that the lumbodorsal or thoraco-lumbar operation produces the optimal results with least undesirable side effects, particularly as regards postoperative severe postural hypotension.

Now, as regards selection of treatment, our feeling is that Group I and Group II cases should be treated by medical measures, either diet or drugs, or both, according to which may be the most effective in any individual case. In these groups surgery should be utilized only for (1) those who are not controlled or unable to follow the medical regimen without severe side effects; (2) those with severe symptoms uncontrolled by medical means; (3) in young patients, particularly males with high diastolic levels; and (4) after toxemia of pregnancy, uncontrolled by medical means, in female patients desiring children.

It is our feeling that Group III cases and Group IV cases, when the renal function is adequate, should be offered the benefits of splanchnicectomy and that diet and drugs should be combined with the surgery in the refractory cases.

It is interesting to speculate on the reason for improvement in cardiovascular disease in those cases who do not respond with maximal blood pressure improvement following surgical treatment. It is our feeling that the reflex changes in blood pressure are greatly modified by denervation of splanchnic bed and, hence, the strain on the entire vascular system is markedly reduced. That this explanation is, in part at least, correct was borne out by studies carried on

by Wilkins⁷ some years ago. He performed the valsalva test, using the Hamilton manometer connected to an intra-arterial needle on patients before and after operation and showed that the secondary overshoot of blood pressure during this test does not occur after properly performed operations. Thus, the patient is protected from a vascular accident that might result following any stimulus producing reflex hypertension. This is illustrated in Figure 2, which shows 99 per cent five-year survival in Group III hypertensive patients in which the blood pressure was satisfactorily reduced. As would be expected, if the blood pressure is not reduced, the survival rate is much less favorable, being reduced to 75 per cent, or a mortality of 25 per cent. However, this is a great deal better than the mortality rate for patients in the same group who are unoperated and who did not have blood pressure controlled by available medical means at that time. The survival of this group in five years was 38 per cent, or a mortality of 62 per cent. Hence, it is our feeling that the operation offers considerable protection even though the blood pressure levels may not be reduced as much as one would desire.

**EFFECT OF BLOOD PRESSURE LOWERING
UPON 5-YR. SURVIVAL OF GROUP 3 HYPERTENSIVE PATIENTS**

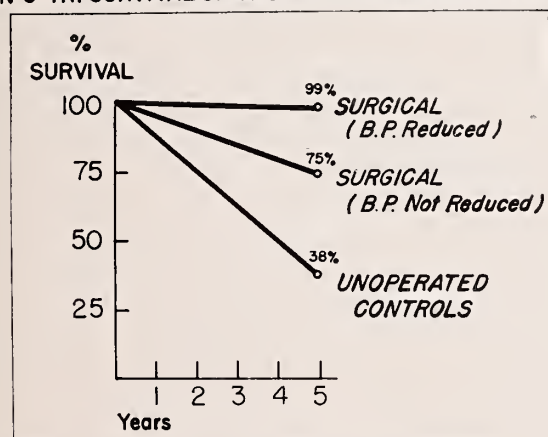


Figure 2: The effect of lumbodorsal splanchnicectomy on survival time in patients followed for five years when blood pressure is reduced and when blood pressure is not reduced compared to unoperated controls.

Physiological effects following this operative procedure include reduction of blood pressure levels and inhibition of reflex vasoconstrictor regulation of blood pressure. As the adrenal glands are partially, if not completely denervated it may be presumed that inhibition of reflex secretion of epinephrin occurs and there is stabilization of blood flow through the visceral vascular bed.

Table 7 shows a five-year mortality rate for 467 non-surgically and 1,266 surgically treated hypertensive patients divided according to sex. The age groups are similar. This is of considerable interest as it emphasizes how much more severe this disease is in males than females in all groups. The non-surgical

mortality rates seen in this table would, without doubt, be vastly improved had these patients been treated by medical methods available today.

**TABLE 7
5 Year Mortality Rates for 467 Non-Surgically and 1266 Surgically Treated Hypertensive Patients Divided According to Sex**

Group	MALES Average age 43		FEMALES Average age 42	
	Non-Surgical	Surgical	Non-Surgical	Surgical
1	27%	11%	10%	4%
2	47%	19%	27%	9%
3	78%	24%	56%	16%
4	97%	62%	73%	55%
Totals	65%	25%	37%	13%

Summary

In summary, the primary aim in this disease is to reduce the blood pressure. If this is done, the cardiovascular disease will surely improve and the patient will do well. There can be no doubt that medical treatment is highly satisfactory in a large percent of patients. For those who are amenable to medical therapy, surgery is not indicated. However, in the most refractory cases surgery, diet, and drugs must all be used in an effort to lower the blood pressure levels so that survival rates for this group of cases may be significantly improved. There should be no conflict between medical and surgical treatment. By cooperative efforts between the internist and surgeon, the mortality still present in this disease can be reduced even further. It is our plea that surgical treatment be considered in cases refractory or unsuitable for medical therapy before they progress to an irreversible, hopeless condition with severe renal impairment and nitrogen retention.

203 Commonwealth Avenue

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THE TREATMENT OF VAGINITIS WITH A NEW NITROFURAN COMBINATION

Henry C. French, M.D. and L. Richard Lanier, Jr., M.D., *Savannah*

Encouraging results are reported in the treatment of *Trichomonas* and mixed infections of both *Monilia* and *Trichomonas* occurring in the vagina.

THE PROBLEM OF VAGINITIS is one of paramount importance in the office of every physician treating women. In our practice approximately 30 per cent of all new patients have a complaint referable to vaginitis of one type or another. Approximately 90 per cent of these cases are so-called specific vaginitis caused by either *Trichomonas vaginalis* or *Monilia* with trichomonads present approximately twice as often as *Monilia*. A much smaller percentage is due to *Hemophilus vaginalis*, senile vaginitis, and diabetic vulvovaginitis.

Satisfactory treatment of these conditions depends on an accurate, complete, and correct diagnosis. The mere presence of vaginal discharge, odor, irritation, and type of discharge do not constitute adequate recognition of the condition. Examination of the vaginal discharge by wet hanging drop and culture is an essential prerequisite to the institution of therapy.

Trichomonal vaginitis has proven to be one of the most difficult problems the physician has to deal with in the office practice of gynecology. The lack of a truly effective agent is testified by the hundreds of preparations presently on the market for trichomonal infestation. *Trichomonas vaginalis* is easily killed in vitro by many of the preparations now on the market, but in vivo the recurrence rate in the past has been nearly 100 per cent. Every factor has been considered in this frequent recurrence. The exact mode of transmission as yet has not been determined. Pearl *et al.*⁷ have conclusively shown that the husband represents an important etiological factor in recurrences. He has shown cultures to be 58 per cent positive in the semen of men whose wives were heavily infested with *Trichomonas vagi-*

nalis. This, with other data, has been used to classify *Trichomonas vaginalis* as a definite venereal disease. We cannot go as far as this because of the equally frequent incidence in virgin and other celibate women. Since it has been shown the trichomonads can live outside the vagina, even in a dried state for six to eight hours,⁴ it would seem infection probably occurs most commonly through contact with infected discharges from other women, or men. It has been our experience that women most prone to recurrences are those working either with the public in general or in offices with large groups of women. Probably in every infection with *Trichomonas* there is an invasion of the urethra and bladder neck. This more than any other factor probably accounts for the frequency of recurrence.

Monilial vaginitis has not presented the problem *Trichomonas* vaginitis has. Monilial vaginitis in all probability results from autogenous infection from the rectum and infected stool contents. It has steadily been increasing with the advent of antibiotic therapy and many acute cases recently have been seen following treatment with broad-spectrum antibiotics used for some systemic infection.

Memophilus vaginalis vaginitis has been described by several authors² but in our practice has not constituted a major problem. Senile vaginitis and diabetic vaginitis are usually treated by controlling the cause.

Therapeutic Agents

Recently, a number of new therapeutic agents have been developed for the treatment of both trichomonal vaginitis and monilial vaginitis. These have given varying degrees of clinical therapeutic success. There has been prior to this time no satisfactory method of treatment of the patient who has both infections concurrently. In trichomonal vaginitis the "Carl Henry Davis routine"¹ has been highly

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recommended because some of the reports show "cure rate" to be 97 per cent. In extensive use of this method we have found cure rates fall far short of this figure. Tritheron® has been suggested as the ideal method of treatment,⁷ being an oral trichomonacidal agent it would eradicate urethral trichomonads and vaginal trichomonads in both the male and female. In our experience we have had no case that could be classified as a true cure with this product. Tricofuron Improved® has been the most successful in our experience of any of these newer agents against trichomonas and mixed cases. About 80 per cent of our patients were classified as true cures after use of this nitrofurantoin combination. Tricofuron Improved® contains two antimicrobial nitrofurans. These synthetic agents act by disrupting the enzymatic metabolism of the microbial cell, without appreciable toxicity for human tissues; they do not inhibit phagocytosis or healing. The active ingredients are furazolidone: N-(5-Nitro-2-furfurylidene)-3-amino-2-oxazolidone, a specific trichomonacide and nifuroxime: anti 5-nitro-2-Furaldoxime, a fungicide effective against *Candida* (*Monilia albicans*). These two nitrofurans are in a water-soluble base as a vaginal suppository and in a vaginal insufflation powder for clinical use.

The patients used in this study were selected over a period of one year from private patients seen in our office. Therapy was begun on a total of more than 200 patients. This report deals only with those patients followed for a sufficient length of time to be considered, according to our criteria to be presented. Most of the patients included were young, married, white females (Table II). 33 patients included had had some previous treatment for their infection and treatment was considered to be a failure. Symptoms had been present for more than four months in 40 patients and under four months in 27 patients. Several patients had been followed in our office with a consistent diagnosis of trichomoniasis in excess of ten years. Every treatment imaginable had been used on this particular group. The presenting symptoms varied considerably and many only had a mild discharge with moderate odor or an occasional irritation. Others had a very severe acute vaginitis with marked edema of the vagina and vulva.

TABLE II
Distribution of Patients

Pre-menopausal—not pregnant	40
Pregnant	20
Post-menopausal	7
Diabetic	7

The diagnosis was based solely on laboratory examination. A clean vaginal speculum was inserted at the first visit and a specimen of the discharge was secured. All were initially examined by the hanging drop method. Nickerson's culture medium was inoculated because of its specificity for identification of *Candida* (*Monilia*) *albicans*. Lash's⁵ culture (*Difco*) media was used for culturing *Trichomonas vaginalis* but cultures were not taken routinely on the new patients. Identification of trichomonads in the hanging drop and/or the recognition of characteristic *Candida* colonies on Nickerson's media was necessary before a patient was included in this series. *Hemophilus vaginalis* vaginitis and non-specific bacterial vaginitis was also considered while diagnosing these patients. We did not use any of the recommended special media to differentiate the *Hemophilus vaginalis* organism in this bacterial group.

A sterile speculum was then inserted into the vagina. The vagina and vulva were cleansed of all discharge with dry cotton balls. Insufflation with Tricofuron Improved® vaginal powder was then carried out, being sure to include the fornices, cervix, and entire vagina. A light dusting with this vaginal powder was then spread over the labia including the urethral area. The patient was instructed not to take a bath until the following morning, to take no douches, and was then instructed to start the following night to insert a suppository each night at bedtime. Treatment should be continued through the menstrual period. The insufflation with Tricofuron Improved powder was repeated three times, at weekly intervals. At the end of two weeks she was instructed to continue therapy with a suppository every other night. In the married patients with a diagnosis of trichomoniasis, the patient was further instructed to request her husband to use a condom for the next three months. No creams, douches, or contraceptive medications to be used until the completion of the study. All patients were followed for three months after onset of therapy, and two months after completion of therapy. Patients were examined one week following completion of therapy, in one month, and again two months later. Microscopic examination of the discharge by the hanging drop method was performed in every instance. Nickerson's cultures were made on all patients where a diagnosis of *Monilia* had been made. Lash's (*Difco*) cultures were made on these patients as follow-up for detecting the *Trichomonas vaginalis* but this culture method was not demonstrably superior to the hanging drop method of examination. (Simplified trypticase serum media is a more specific media for the culture of *Trichomonas vaginalis* organism.) For the patient to be considered cured all three of these examinations had to be

VAGINITIS / French

negative. Patients included in this series had to meet the following criteria:

1. They had received a complete course of treatment.
2. No other medications were used during the course of therapy.
3. The last examination was within six months of the time therapy was instituted.
4. In pregnant patients, delivery must not have ensued before the last examination was made.

A total of 67 patients met all of these criteria. Any patient who had a "positive test" at any time during the three examinations was included in this report. Our first inclination was to include as failures all patients who had not completed therapy and follow-up. Should we have done this, it would have given a distorted picture, since the patient who feels that she is cured and well is less likely to return than a patient who has pertinent symptoms. Results of therapy were divided into subjective results and laboratory cures. The initial diagnosis was, in this group, *Candida* (*Monilia*) *albicans*—3; *Trichomonas vaginalis*—38; and *Trichomonas* and *Monilia*—23. Subjectively 59 patients were improved with Tricofuron Improved® therapy; six showed no improvement and two showed a mild local "reaction" (this "reaction" was not clinically established as being due to this nitrofurantoin combination as used for therapy), (Table 1).

TABLE II
Subjective Results

Diagnosis	Number	Symptom Free	Clinically Improved but Positive Culture
<i>Trichomonas vaginalis</i>	38	34	4
<i>Trichomonas vaginalis</i> and <i>Candida albicans</i>	23	21	1*
<i>Candida</i> (<i>Monilia</i>) <i>albicans</i>	3	1	1

* (Positive only on *Candida albicans*' medium)

38 cases of trichomonal infection treated with Tricofuron Improved:® 28 were cured, with nine failures.

23 cases of mixed infection (trichomoniasis and moniliasis): seven were cured of both infections.

In 20 pregnant patients (which are recognized as the most difficult to cure): eight were cured of

trichomoniasis, and four of moniliasis. 33 patients had failed to respond to previous therapy. Of these, 20 were treated with Tricofuron as the previous therapy. Nine of these patients were cured with Tricofuron Improved suggesting a combined action of Furoxone and Micofur on the trichomonads.

TABLE III
Results of Therapy with Tricofuron Improved

Diagnosis	Number	Cure: <i>Trichomonas</i>	Cure: <i>Moniliasis</i>	Failure: <i>Trichomonas</i>	Failure: <i>Moniliasis</i>	Cure: Both
Trichomoniasis	38	28	0	9	0	0
Trichomoniasis and Moniliasis	23	14	11	9	12	7

Discussion

Vaginitis as treated in office practice presents a complex and vexing problem to every physician. The search for a single therapeutic agent that will be curative in all varieties of vaginitis has not been found. It is obvious that an effective oral medication for use in both sexes combined with an effective concomitant local treatment, especially for the female, will eventually eradicate the diseases.

Due to the nature of the disease, most physicians treat the vaginitides symptomatically and thus do not identify the specific infestation or infection. For effective treatment of trichomonal and monilial vaginitis, the specific identification of the infesting or infecting organism must be made.

Moore and Simpson⁶ have described *Trichomonas vaginalis* vaginitis as "an emotionally conditioned symptom" and advised superficial psychotherapy in these patients. We are all familiar with the cases of trichomonal vaginitis that seemingly spontaneously disappear with little or no treatment. We know of no series adequately followed that gives us an indication of how many cases of trichomonal vaginitis would "die out" spontaneously. Certainly this would seem to be an informative approach to be followed in subsequent studies. Because of the known invasion of the urethra and bladder neck by the *Trichomonas vaginalis* peroral treatment would be the ideal therapy. The therapeutic effectiveness of drugs presently available have resulted in some disappointment. From our survey of the recent literature, and from our personal experience, we found Tritheon® to be ineffective.⁹ Tricofuron Improved Vaginal Suppositories,® and Vaginal Insufflation Powder® have given us consistently good clinical results. The

ideal oral drug for the treatment of *Trichomonas vaginalis* organism has not been found to date.

Conclusion

We have clinically evaluated Tricofuron Improved in the treatment of trichomonal and monilial vaginitis with a new nitrofurantoin combination, Tricofuron Improved. We found this combination to be superior to any previously used for the local treatment of *Trichomonas vaginalis* vaginitis. We also found it to be effective in treating mixed infestations of *Candida* (*Monilia*) *Albicans* and *Trichomonas vaginalis*. Presently we can recommend Tricofuron Improved as the medication of choice for treating *Trichomonas vaginalis* vaginitis, and mixed trichomonal and monilial vaginitis. Therapy must be continued for at least one month and through one menstrual period.

Summary

A discussion of the vaginitides is presented. Difficulties and problems encountered are discussed. The use of Tricofuron Improved vaginal suppositories and vaginal insufflation powder was evaluated as a local treatment and cure. 86.8 per cent of the cases of *Trichomonas vaginalis* vaginitis treated were

cured. This nitrofurantoin combination proved to be a great advance in the therapy of mixed cases of trichomoniasis and moniliasis.

2 Medical Arts Center

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VOLUNTARY HEALTH INSURANCE

THE NUMBER OF PEOPLE in Georgia covered by voluntary health insurance has reached a new high, the Health Insurance Council reported today. The Council estimates that over 2,157,000 persons in the state now are protected by some form of insurance designed to help pay hospital and doctor bills.

This figure, the Council said, is part of the continued growth of health insurance throughout the country, which was revealed in its 12th annual survey of the extent of voluntary health insurance coverage for 1957. The number of people covered by some form of health insurance in the nation, according to a Council estimate, is now 123,000,000, or 72 per cent of the total U. S. civilian population.

The Council survey, based on reports of insurance programs of insurance companies, Blue Cross-Blue Shield, and other health care plans, points out that the 2,157,000 persons covered by hospital ex-

pense insurance in Georgia as of December 31, 1957 surpasses the 1956 year-end total of 1,943,000.

The number of people with surgical expense insurance, which helps to defray the cost of physicians' charges for operations, climbed to 1,770,000 as compared to 1,585,000 in 1956.

Persons protected by regular medical expense insurance, providing for doctor visits for non-surgical care, rose to 580,000, compared to 495,000 the year before.

The Health Insurance Council, which is a federation of eight insurance associations representing over 90 per cent of the accident and health insurance business handled by insurance companies, stated that this growth reflects the desire of the people of Georgia to help protect themselves against the cost of accident and illness.

REPORT OF STAPHYLOCOCCAL DISEASE

EARLY DETECTION OF STAPHYLOCOCCAL infections in hospitals, rigid measures to prevent their spread, and increased research to find better methods of preventing and treating them have been recommended by the National Conference on Staphylococcal Disease, the Public Health Service has reported.

The Conference, co-sponsored by the Public Health Service and the National Research Council, met in Atlanta, headquarters of the Communicable Disease Center of the Public Health Service, September 15, 16, and 17. It was attended by delegates from 59 professional organizations and numerous authorities on various aspects of the infection problem.

The conference delegates agreed that the drug-resistant infection is now a problem in practically all hospitals, not only in the United States, but throughout the world. Serious epidemics, although infrequent, have cropped out unexpectedly in many hospitals.

Because staphylococcus germs are ubiquitous—it is estimated that over 50 per cent of the population carry one or many strains on their skins and in their noses—and because the drug resistant strains permeate hospitals and their personnel, the problem of preventing serious infection, the delegates agreed, sifts down to finding how the dangerous strains are spread and building barriers against them. Although the delegates recognized that contaminated air and furnishings could be responsible for spreading the infection, the prevailing opinion was that personal contact is certainly one of the most common causes. Most of their recommendations were therefore concerned with reducing this cause.

Major Recommendations

1. *Organization of infections control committees in all hospitals.* These committees should have sufficient authority to investigate infections and establish and enforce hospital policies. They should include representatives from all services and divisions, all of whom should have a keen interest in the problem, and should meet at regular and frequent intervals. Committee members should be responsible for seeing that hospital personnel are properly trained in anti-infection procedures and that these procedures are followed in day-by-day activities. Local

health officials should be asked to serve as consultants to these committees.

Organization of infections control committees by local medical societies, with representatives from the medical, nursing, and housekeeping staffs of all the hospitals in the area, was considered a necessary supplement to the intra-hospital committee.

2. *Use of an "infection log" in which all infections are classified and pertinent data recorded.* This would make it possible to determine whether infections are increasing and would also help the control committee to evaluate the effectiveness of its measures.

3. *A plan for excluding from contact with patients all personnel who have boils or other active staphylococcal lesions or who are known to be carriers of dangerous and epidemic strains.* Periodically in nurseries for the newborn and at times of epidemics in other areas of the hospital, cultures should be taken of personnel in order to detect, remove, and treat dangerous carriers. During epidemics, persons found to be carriers of dangerous epidemic strains should be removed from contact with patients until they are free from infection.

4. *A local plan for establishing criteria on the discriminate use of antibiotics in medical and surgical treatment.* Routine use of antibiotics to prevent possible infection in patients was considered highly undesirable.

5. *Arrangements to store cultures from staphylococcal infections.* This would help the hospital to trace the source of an epidemic if one should occur. The length of time these cultures should be stored should be decided by the infections control committee.

6. *Isolation of infectious patients, particularly those with pulmonary and skin infections, even if this means expanding isolation facilities.* More emphasis on home care, in preference to hospitalization, for patients with minor illnesses or with diseases that make them particularly vulnerable to staphylococcal infection was also suggested. Diagnostic and treatment procedures in the hospital that open the skin—which is the normal barrier to staphylococcal infection—should be kept to a sensible minimum.

7. *Special precautions in the nurseries for the newborn, such as elimination of overcrowding and the maintenance of rigid sanitary standards.* Bathing

babies immediately after birth with an antiseptic, such as hexachlorophene, was also recommended.

Since babies are the principal source of spreading the disease into the community, sample surveys of families at periodic intervals after their babies have been discharged from the hospital were advised. Such surveys can be made by telephone, mail questionnaire, or home visit. Early detection of nursery-acquired infection would help to prevent further spread. These surveys would also indicate whether the hospital has an infection problem which it has not recognized because of the late appearance of symptoms.

8. *Development of intensive and continuous training programs for professional and subprofessional members of hospital staffs.* To aid in these programs, the delegates recommended that the American Hospital Association, the American Medical Association, and the Public Health Service collaborate in pro-

ducing and distributing training films and other educational materials. They also proposed that the Public Health Service produce and distribute widely to hospitals a manual containing all available information on environmental disinfection and on the sterilization of equipment, linen, and other objects used with patients.

9. *Strengthening of laboratory services.* By the phage typing process, it is possible to identify dangerous strains of staphylococcus and thus enable hospitals to trace the source of infection. However, since it is not practical for many institutions to do this, it was recommended that the Public Health Service, through its own facilities and by assisting state and local health department laboratories, should aid in performing phage studies, particularly in epidemic situations.

PASTORAL COUNSELING SERVICE SET UP IN MEDICAL CENTER

A MEDICAL CENTER outpatient service for persons needing religious counseling has been described by two North Carolina ministers.

Richard K. Young, Th.D., and Benjamin S. Patrick, Th.M., Winston-Salem, reported on the outpatient pastoral counseling service at North Carolina Baptist Hospital in a current issue of the *Journal of the American Medical Association*.

It is one more example of the growing cooperation between medicine and religion in helping persons who are ill or who need help in solving their daily problems.

Outpatient counseling at North Carolina Baptist Hospital resulted from a program of intensive pastoral work with inpatients, the authors said. Many patients requested that the chaplain talk with members of their families. Many patients themselves returned for counseling after their discharge from the hospital, and eventually local pastors began sending their patients to the hospital chaplain.

In 1953 a program of outpatient counseling was set up. In that year there were 1,621 visits. By 1957 the number had grown to 3,208 and people were coming to the service from three states.

The staff consists of 13 men, all ministers. Six are permanent members and seven are fellows or interns. "These counselors function in their roles of ministers—but ministers with special training and experience in understanding human behavior," the authors said.

They deal with persons having typical problems

of adjustment and make no attempt to handle cases of mental illness. When such patients appear, they are referred to the psychiatric clinic. Often such referrals are more easily made by chaplain-counselors than by local pastors, the authors noted.

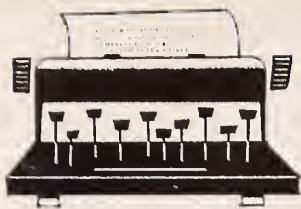
Many problems are brought to the clinic. More than a third of the persons seen last year received marital counseling and many received "growth counseling"—growth in self-understanding.

The department looks on counseling as a religious process in which the individual is helped to realize more nearly the full potentials of his own personality, they said.

The outstanding advantage of a pastoral counseling service in a medical center is the availability of medical resources. If patients need medical care, they are referred to the medical departments. The medical staff and the chaplains realize that both play a part in the comprehensive care of the patient.

Another advantage is that counselors can be trained within the framework of interprofessional relationships. The medical and religious groups work closely together, exchanging information and learning from each other.

A promising development that has grown out of the North Carolina program is the opportunity for research, they said. The hospital has employed a clinically trained pastor to do research in pastoral care. As far as the authors know, this is the first time that a medical center has employed such a person.



editorials

THE STAPHYLOCOCCAL DISEASE PROBLEM

EACH NEW APPARENT step forward that man achieves seems to bring down upon him totally unanticipated problems to replace the old. Few, if any, suspected that with the introduction of the first of the antibiotics new generations of highly virulent antibiotic resistant organisms would be fostered. Yet staphylococcal disease, as it manifests itself today, is in large part a by-product of the antibiotic era. The widespread and often indiscriminate use of antibiotics, prophylactically or otherwise, has contributed mightily to our present troubles. A false sense of security has also been engendered in many quarters by the availability of these agents, with resulting lapses in the maintenance of the sanitary hospital environment. The problem belongs to the community as well as to the hospital, however, and joint action of many organizations and individuals concerned with health in both areas will be necessary if true control is to be achieved. A national effort is now being organized along these general lines. Local, State, and Federal forces are being coordinated in an effort to apply existing knowledge toward control, and to focus on areas requiring further research. One of the most important elements of this effort must be the establishment of infection committees in hospitals throughout the country.

Staphylococcal diseases are nothing new, of course. They have plagued mankind for centuries, but with the appearance of antibiotic resistant virulent strains, some of which are capable of producing epidemics, many new problems have developed. Strains resistant to an antibiotic are selected out for survival as a simple result of the elimination of their more sensitive brethren from the field of competition for living space. Laxity in aseptic techniques further insures the survival and multiplication of these hardy resistant strains. Finally, shifts in the composition of hospital populations in recent years toward more of the very young, the post-partum

female, the very old, and the debilitated have provided the organisms with a somewhat richer field of highly susceptible hosts than was true in years past.

The magnitude of the staphylococcal problem is not known. Quantitative measurements are not available. The epidemiologist cannot turn to any precise statistics such as those gathered daily for auto accidents, poliomyelitis, diphtheria, or dog-bite. It is clear, however, that the problem is great. There is general agreement on this point among the national professional medical and public health organizations, and, from their experiences in practice in recent years, few physicians would dispute that this is the case. In addition to an out-pouring of material in the lay press, well over 400 major and minor medical articles have been written on the problem in the past five years in the English language alone. References to severe endemic and epidemic situations in hospitals appear over and over again. In the hospital the centers of trouble have been on the surgical and obstetrical services, in the newborn nurseries, and among debilitated patients wherever they may be found. Pyoderma, mastitis, surgical wound infections, and infections superimposed on debilitation have been the major forms of morbidity. Only recently has the community in general come to share some of the spotlight once held alone by the hospital.

There have been several major developments in recent years which have lead to great improvement in the state of our knowledge of staphylococcal disease. Antibiotic sensitivity testing has come to be increasingly useful as a guide to intelligent application of antibiotics to clinical problems. As a procedure for differentiation of strains, it has provided an important addition to the older, simple techniques based on such characteristics of pathogenic staphylococci as pigment, coagulase, and hemolysin production. This testing procedure has lead to the recognition of specific antibiotic resistant strains in the hospital.

Bacteriophage Typing

Since 1953, an even more useful technique, bacteriophage typing, has come into general use for strain differentiation. Phage typing as an invaluable epidemiologic tool has lead to the demonstration of epidemiologic patterns of staphylococcal disease. It has been shown that since 1954, most antibiotic resistant staphylococci belong either to phage group III or to "type 80/81." Type 80/81 has been called "the epidemic strain" but this is perhaps unwise. There are other epidemic strains, and 80/81 is very often found in endemic situations.

Specific strain identification permits hitherto impossible epidemiologic investigations. The healthy nasal carrier, perhaps a nurse, the house officer with

a paronychia, the orderly with chronic otitis media, can for the first time be identified as sources of specific outbreaks. Analyses of the degree of contamination of the operating room, ward, or nursery environment can now be not merely general quantifications, but specific studies relating the degree of contamination by a specific strain to an outbreak caused by the same strain. It can be anticipated that phage typing will help to resolve the question of the relative importance of the environment and direct contact in maintaining staphylococcal disease in the hospital. Phage typing has permitted the tracing of infections from the hospital out into the community where a virulent strain may be perpetuated in a family for many months before perhaps being reintroduced into the same hospital at a later date. Studies of this sort have opened a new field of investigation and reveal that the problem is not for the hospital alone as was commonly accepted only three or four years ago.

More Investigations Necessary

Many resources are even now available for partial control of staphylococcal disease, but it is also clear that more investigations will be necessary before total control can be achieved. Most important of all is that there be a great proliferation of hospital infection committees throughout the nation. These committees, composed ideally of representatives of the administrative, clinical, nursing, housekeeping, and laboratory divisions of the hospital represent one of the first priorities in the control program. The committees deserve full support in their efforts to assess the magnitude of the problem in their hospitals. An awareness of the nature and magnitude of the problem within a given hospital is fundamental to control of the problem in that hospital. Management of control efforts within the hospital should be fully within the hands of this committee. The committee should decide where improvements in aseptic techniques are in order, and should work to improve standards of cleanliness throughout the hospital. With the assistance of the hospital laboratory in the case of a large hospital, or outside laboratories (local, state, regional, as the case may be), the committee should be able to identify and cope with the problems caused by infected personnel. The committee should encourage the judicious use of antibiotics within the hospital. The hospital committees should be organized with the understanding that they may call for epidemiologic, laboratory, and technical assistance from the local and state Health Departments when necessary. These resources are backstopped in turn by many types of Federal services which are available to them on request, through the Communicable Disease Center of the U.S. Public Health Service. By self appraisal and internal con-

trol, the hospital infection committees of the country should be able to go a long way toward the goal of true control, in the community as well as in the hospital, of staphylococcal disease.

Frederick L. Dunn, M.D.

Chief, Staphylococcal Disease Unit

Epidemiology Branch

CDC, Atlanta

CONCORD OUT OF CONFLICT

ALL THREE BRANCHES of the organizational democracy of the A. M. A. have functioned separately but harmoniously in resolving a disagreement between some medical educators and medical practitioners.

The disunity arose when the Richmond County Medical Society hesitated to accept into membership any physician who treated fee-paying patients at the University of Georgia's Talmadge Memorial Hospital while serving as faculty members of the university medical school. The society argued that these physicians were unable to control disposition of the fees and therefore they were taking part in the corporate practice of medicine. The hospital, in turn, contended that all fees went into its research fund and that compensation from patients able to pay was preferable to free service for them.

What makes this situation significant is that its handling by the medical profession illustrates the strength of the A. M. A.'s "three branches of government" as an effective constitutional democracy. These branches are similar to the United States system of democratic government, in that the policy-making House of Delegates corresponds to the legislative branch in Congress, the administering Board of Trustees is akin in concept and function to the executive branch centered in the White House, and the Judicial Council operates in the manner of the U. S. Supreme Court as a reviewing tribunal.

How did these three A. M. A. branches operate in the Georgia case? In June of 1956 the A. M. A.'s "legislative" House of Delegates (at the suggestion of the Committee on Medical and Related Facilities) recommended that, "on request of a medical society and a medical school, the American Medical Association's Board of Trustees establish, in cooperation with the Association of American Medical Colleges, a special committee whose function would be to investigate areas where there is friction between the medical school and the profession."

Little more than a year later this policy came to its first test when the Judicial Council was asked to rule on precisely such a friction. Six faculty mem-

bers serving at the Talmadge Memorial Hospital alleged that the Richmond County Medical Society, by keeping them out, was in effect denying them membership in the A. M. A. and thus jeopardizing their careers. What did the Judicial Council do? Like the Supreme Court, it essentially upheld an action by the democratic system's legislative branch. The Council suggested that the Board of Trustees (executive branch) form a committee to help settle differences between the school and the medical society.

This was wisely done with the cooperation of the A. A. M. C. last April when seven physicians under the chairmanship of Dr. Leonard W. Larson, a member of the A. M. A. Board of Trustees, met separately (and later together) with representatives of the medical school and hospital, the state medical association, and the county medical society. The outcome is an agreement acclaimed by both sides. This pact recognizes that it is not the policy of the medical school or its hospital "to enter into the practice of competitive medicine"; favors the admission of "patients of unusual teaching interest" when referred by attending physicians (except in emergencies); and permits but does not require that fees (set by the attending faculty members) be deposited in a research fund of the hospital. A liaison committee of medical school and medical society representatives was created to resolve specific cases which could lead to controversy.

The A. M. A. committee's success can be attributed largely to the intense desire of its members to learn all the facts in the case, their willingness to travel to the scene and examine the issues in systematic detail, and their insistence on discussing only the germane data at business-like meetings (rather than stray to the emotion of unsubstantiated opinion at informal sessions). As one spokesman for the group commented later: "It may well be that this committee has established a precedent which may prove quite beneficial in the resolution of similar situations."

Much credit must be given to the committee who determined facts and objectively turned conflict into concord through direct negotiations with the parties concerned. Credit also belongs to the early members of the A. M. A. who foresaw the values inherent in the legislative-executive-judicial organization and so designed their constitution so that it might effectively represent the organized physicians of this nation.

Reprinted from the *Journal of the American Medical Association*, August 30, 1958.

ACUTE INTERMITTENT PORPHYRIA

SINCE FIRST DESCRIBED by Gunther¹ in 1911, Acute Intermittent Porphyria has intrigued physicians. Always unexpected in its manifestations, it crops up suddenly and puzzlingly just often enough to keep diagnosticians on their toes. Considered a rare disease, it becomes a seven-day wonder whenever it is diagnosed. Undiagnosed, sleepless nights and short tempers on the tissue committee are the only rewards.

A remarkable amount of interest in the disease has developed in Georgia since the uncovering of a large series in the Jesup area.² This is indeed laudable, for without interest in and consciousness of the disease, it can hardly be diagnosed.

Although this editorial is concerned primarily with Acute Intermittent Porphyria, it might be well for the sake of clarity to devote a few lines to Porphyria in general. Porphyria is a group of three or possibly more diseases. There are the Acute Intermittent, Porphyria Cutanea Tarda, and the Hematopoietic or "Congenital" types. Not infrequently a mixed type occurs showing manifestations of both of the first two (Intermittent and Cutanea Tarda). Reference to the last as "Congenital" is a misnomer as all are congenital and familial. In the others, however, clinical manifestations usually do not occur until adult life.

Porphyrins may be found in the urine in all types. Differential diagnosis can be made by properly detailed chemical analysis of the urine but it is far simpler to differentiate the type on clinical grounds. The erythropoietic form manifests itself in early childhood. The patient is anemic, has an enlarged liver and spleen (from deposits of porphyrins), and most striking of all, demonstrates red fluorescence of the teeth and mucous membranes under the Wood's light. They do not have attacks characteristic of the acute form, but demonstrate hypersensitivity of the skin to light.

Porphyria Cutanea Tarda in pure form is a dermatologic entity. Skin sensitivity, often with pigmentation and hypertrichosis, are the only significant manifestations. Slight fluorescence of teeth and mucous membranes under ultraviolet light may occur but it is not apt to be striking. In the "mixed" form acute attacks as described below may occur as well.

Acute Intermittent Porphyria is more versatile. Rather than limiting itself to the confusion of dermatologists or pediatricians, it takes on the whole field. It is quite capable of confounding internists, disorienting psychiatrists, and all too often

completely frustrating surgeons. Pediatricians are not exempt and in the mixed form it can pester the dermatologists.

Gunther's original triad of obstipation, vomiting, and abdominal pain is frequently seen. However, this may be complicated by almost any conceivable neurological manifestations. Neuritides are frequent (and often permanent) as well as generalized or localized paralysis. Landrey's Syndrome of ascending paralysis may occur. Cerebral manifestations with convulsions, coma, delirium (often violent), or schizophrenic-like syndromes are seen. Any part or combination of these events may occur in a single case. Like syphilis it is a great imitator, but it can add as well to the confusion of all.

Obviously, diagnosis can be made only by means of a high index of suspicion. Yet, even here one must be careful and not discard the possibility on one examination of the urine. The disease is intermittent not only in regard to attacks, but in urine findings as well. Once the disease is considered the urine should be examined repeatedly.

A fresh specimen should be examined. It is usually acid in reaction and may or may not be dark in color. Porphyrins per se are not excreted in the Acute Intermittent form.³ A porphyrin precursor, porphobilinogen, is excreted by the kidneys. Porphyrins are then formed in the bladder or in the voided specimen with consequent darkening of the urine. This may be hastened by exposure to light and heat. It is for this reason that a fresh specimen must be used. Porphobilinogen disappears fairly rapidly (usually completely within 24 hours) and the fresher the specimen the more likely a positive result.

Porphobilinogen may be demonstrated quite simply by the method of Watson and Schwartz.⁴ To 2 cc urine add 2 cc Ehrlich's Reagent (Paradimethylaminobenzaldehyde 0.8 gm. in 250 c.c. 6 N.HCl) and 4 cc supersaturated solution of sodium benzoate. A red or pink color is likely to occur. This may indicate either porphobilinogen or urobilinogen. The solution is then extracted one or more times with an equal volume of chloroform. If after thorough extraction, red or pink color remains in the aqueous phase, porphobilinogen is present. If quantitation is desired, it may be read at 660 and 630 mμ in a spectrophotometer against a blank of 2 cc of the patient's urine diluted to volume with water.

The presence of porphobilinogen in the urine is diagnostic of Acute Intermittent Porphyria. Porphyrins alone are not. They may be demonstrated by a yellow, orange, or red fluorescence of the urine under ultraviolet light. This fluorescence is accentuated by appropriate extraction and concentration.⁵ More definitive identification of porphyrins may be made by spectrophotometry.

The above tests are simple and may be done in a few minutes in practically any hospital laboratory. Yet, as mentioned, a high index of suspicion is necessary in order to have it done. Urine should be tested for porphobilinogen repeatedly in any case of at all dubious nature in which neurological symptoms, mental aberrations (including alcoholics), or pain, especially in the abdomen, are prominent.

Treatment is still unsatisfactory. At the moment, encouraging results seemingly are being obtained with BAL and EDTA, and occasionally with ACTH.⁶ In addition, scrupulous avoidance of drugs which might accentuate the illness must be practiced. These include barbiturates, sulfonal, veronal, sedormid, and possibly sulfonamides, alcohol, and chloral. Paraldehyde appears to be safe as a sedative. Demerol,[®] intravenous procaine, and ganglionic blocking agents may be used for relief of pain. Excellent nursing care is of course mandatory. Restraints are occasionally necessary.

Probably most hopeful of all at the moment is the possibility of prophylaxis of the attacks. Practically all of the cases that have died have had one or more of the above drugs, usually barbiturates. When a new case is found, all available members of the family should be tested repeatedly for porphobilinogen in the urine. Those found to carry the trait should be thoroughly instructed in the necessity of avoiding these drugs. Best of all, they should be given wallet cards such as diabetics carry bearing the essential information.

Lastly, it would be extremely helpful if cases occurring in or migrating from Georgia were reported for cataloguing and genetic study. Such reports may be made to the author or to the Medical Department of the Medical College of Georgia.

Alex T. Murphey, M.D.,

Medical College of Georgia

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ECONOMICS OF MEDICINE

LATEST FIGURES RELEASED by the government show that while living costs have gone up an average 105 per cent in the 20 years since 1938, doctors fees have increased only 84 per cent.

This should come as a surprise to some of the

"experts" we often hear complaining about the cost of medical care. What these people are really referring to is the tremendous rise in hospital costs which now stand 300 per cent higher than in 1938.

It is interesting to note that the increase in doctor's fees is well below the average.

For instance, in the 1938-1958 span the cost of a pair of baby shoes rose 171 per cent, a new car 125 per cent, and food—the main drain on the family budget—a whopping 151 per cent.

Men's haircuts rose 206 per cent, newspapers 124 per cent, and movie admissions 120 per cent.

Oddly enough, costs of men's clothes in those two decades rose 110 per cent, but women's clothes climbed only 78 per cent.

A. H. A. ADOPTS STATEMENT OF POLICY

THE HOUSE OF DELEGATES of the American Hospital Association, meeting in Chicago recently, adopted a statement of policy with respect to meeting the hospital needs of the aged. The statement, which supersedes all previous actions taken by the association, follows:

1. The American Hospital Association is convinced that retired aged persons face a pressing problem in financing their hospital care.

2. It believes that federal legislation will be necessary to solve the problem satisfactorily. It has, however, serious misgivings with respect to the use of compulsory health insurance for financing hospital care even for the retired aged.

3. It believes that all possible solutions must be vigorously explored, including methods by which the dangers inherent in the Social Security approach can be avoided.

4. It believes that every realistic effort should be made to meet the hospital needs of the retired aged principally through mechanisms utilizing existing systems of voluntary prepayment. However, it is conceivable that the use of Social Security to provide the mechanisms to assist in the solution of the problem of financing these needs may be necessary ultimately.

5. It believes that any legislation developed to provide for government participation to meet the hospital needs of the retired aged should be so devised as to strengthen the voluntary prepayment systems, and should conform to the following principles:

(a) Legislation designed to provide for the hospital needs of the retired aged should provide essential hospital services and should exclude custodial care provided for nonmedical reasons.

(b) Government participation should be restricted to persons over 65 who are not regularly and substantially employed. The voluntary prepayment system provides a satisfactory mechanism for the coverage of other persons regardless of age.

(c) Any program in which the federal government participates to meet the hospital needs of the nonindigent aged should emphasize individual responsibility and make the application of a means test unnecessary for obtaining benefits.

(d) Such a program should be based on the service benefit principle and should provide benefits sufficiently comprehensive to remove the major economic barriers to hospital care for the retired aged.

(e) Such a program should make benefits available through nonprofit prepayment plans.

(f) Hospitals should be paid fully for the cost of care rendered.

(g) Such a program should not provide services in facilities operated by the federal government.

(h) Such a program should provide reasonable criteria to determine the eligibility of hospitals to participate, but the federal government should be precluded from interfering in the administration and operation of hospitals providing the services.

(i) Such a program should maintain the free choice of doctor and hospital by the recipient.

(j) Such a program should permit and encourage continuous adaptation to new knowledge in the provision of services.

president's letter

YOUNG GENERAL PRACTITIONERS are locating more and more these days in Georgia's small rural communities where their services are so badly needed. For this trend we can thank the State Medical Education Board and the Physicians Placement Service of the MAG.

The MAG headquarters office, working with the Sears Roebuck Foundation, has assisted the citizens of Rochelle who have erected a modern clinic building and attracted a physician. Phillip Woodbury, a graduate of Duke University School of Medicine in 1953, began practice in Rochelle early in September. This climaxed more than four years' effort on the part of the community.

A number of scholarship recipients are practicing in rural Georgia under the auspices of the State Medical Education Board, of which I am a member. I have just learned that Harry Foster has located in Lithonia.

Mr. Siebert, executive secretary of the Board, informs me that approximately 20 more young general practitioners will be available to locate in small Georgia communities by July, 1959.

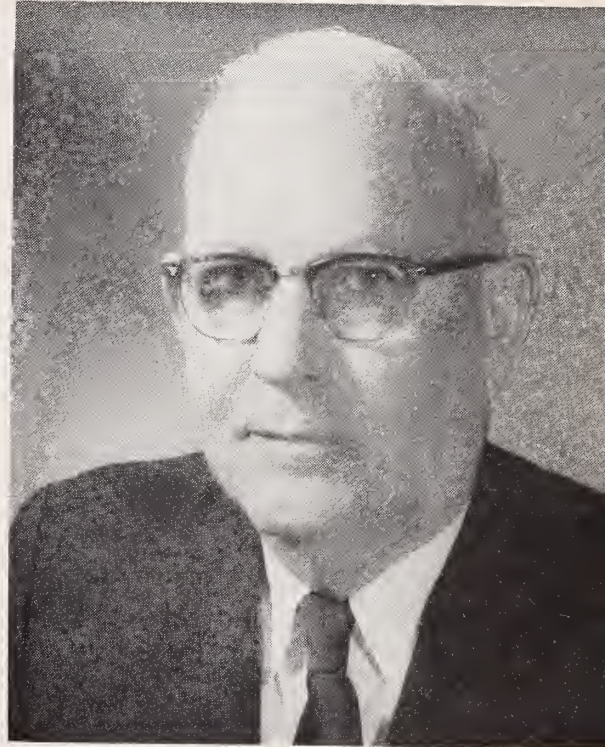
This is good news, indeed. If there's anything we need more of it's general practitioners, for they are the backbone of medicine.

I want to strongly commend the Georgia Academy of General Practice which is celebrating its tenth anniversary this month at the Dinkler-Plaza Hotel, October 15 and 16, in Atlanta. This organization has done a great job in strengthening the position of the general practitioner. The Academy also requires continual post graduate education as a prerequisite for membership.

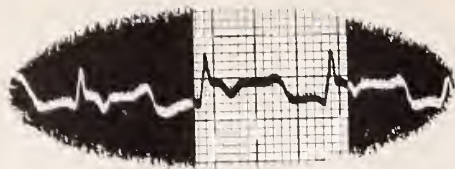
Gov. Marvin Griffin has officially proclaimed October 12-18, 1958 as "GENERAL PRACTITIONER'S WEEK." His proclamation declares "that it is altogether proper and fitting that the state of Georgia pay deserved recognition to the General Practitioners for their dedication to the humanitarian duty of relieving human suffering."

Lee Howard M.D.

President, Medical Association of Georgia



Lee Howard, Sr., Savannah



heart page

SHOCK OF CARDIOVASCULAR ORIGIN

Lamont Henry, M.D., *Atlanta,*

IN SHOCK OF cardiovascular origin two physiological derangements exist; namely, a decreased cardiac output and peripheral vascular collapse. A disparity then results between the circulating blood volume and the capacity of the vascular bed. The chain of events go something like this; a nervous system reflex is triggered, presumably causing pooling of the blood in the viscera and dependent portions of the body. The reduced return of venous blood is reflected in diminished cardiac output. Vasoconstriction, especially arterial, promptly follows, so that normal blood pressure may be temporarily maintained. Blood is shunted from less vital areas, especially the kidneys and extremities, in order to sustain an adequate flow to the brain and heart. This temporary vasoconstrictor mechanism eventually fails, after which hypotension results and the low head of arterial blood pressure is insufficient to adequately supply vital tissues. Functional integrity of these tissues, most notably the myocardium, brain, and kidneys is damaged by a reduced oxygen supply, by insufficient carbohydrate supply, and probably by the lack of other required elements of cellular metabolism. The ammonia concentration of the blood rises and may contribute to blunting of the sensorium. From this description one is able to understand the various clinical characteristics most commonly used to describe shock, such as hypotension, cold clammy skin, weakness or faint-like sensation, low pulse pressure, oliguria, and dulling of the sensorium.

Although by far the most frequent cause of cardiovascular shock is acute myocardial infarction, certain other cardiac abnormalities may produce an abrupt

hypotensive state, which may either deteriorate into shock in certain environments or in themselves may precipitate a myocardial infarction. Some of these conditions may be listed as follows: cardiac tamponade from various causes; dissecting aneurysms; severe aortic stenosis; cardiac arrhythmias such as paroxysmal atrial, nodal, or ventricular tachycardia; atrial flutter or fibrillation; congestive heart failure; and Stokes — Adams syndrome. Other miscellaneous cardiovascular catastrophies encountered infrequently may also cause varying degrees of shock such as ventricular fibrillation, ventricular standstill resulting from auriculo-ventricular block, a ball-valve thrombus, pedunculated tumors, septal perforation, ruptured ventricular aneurysms, rupture of papillary muscles, valve cusps, or chordae tendinae.

Apparently a certain percentage of the milder degrees of shock states of short duration are rectified by the above mentioned body protective mechanisms. It has been estimated that approximately one out of five patients who are in shock will survive if nothing more is done than to administer oxygen and relieve pain. A reduction in the mortality rate from 80 per cent to 60 per cent has been accomplished largely by the addition of the vasopressor agents to the treatment. The most commonly known vasopressor agents are Wyamine Sulphate,[®] Neosynephrine,[®] and Norepinephrine (Levophed[®]). There is general agreement at the present that Levophed is the most potent and most rapid acting of the vasopressors. The disadvantages are that it must be administered intravenously and that infiltration of the tissues likely will produce a slough. For prolonged titration, most prefer a cut-down on the antecubital vein, and the use of a polyethylene catheter inserted into the lumen of the vein.

Other antishock measures which may also be used are; elastic bandages from the ankles to mid-thighs, oxygen in concentrations from 50 per cent to 90 per cent, Demerol[®] parenterally in 50 to 100 mg. dosage for restlessness, anxiety and/or pain. Digitalization, dehydration, and other proven measures employed for treating acute pulmonary edema should be used as early as one suspects failure of the left ventricle. Cardiac arrhythmias should receive their appropriate treatment when present. Cortisone and Cholinesterase may be of value in restoring both responses to antishock therapy.

The urinary output has been shown to be a very sensitive index of shock. For this reason it is advisable to insert an indwelling catheter into the urinary bladder in order to measure accurately the urinary output.

Apparently a close relationship exists between the

circulating blood volume and the arterial blood pressure. Perhaps a more sensitive indication of the degree of shock is the reduction of the pulse pressure; 25 m.m. of mercury or less appears to be a critical figure for the pulse pressure value. However, as an index of the trend toward deterioration or improve-

ment in a given case, the systolic arterial pressure remains one of the most accurate and readily available criteria.

The use of infusions and transfusions are on the wane because their use has failed to lower the mortality rate.

NEW MEMBERS OF THE MAG

<i>Name</i>	<i>Address</i>	<i>Classification</i>	<i>County Society</i>
Dale T. Addington	478 Peachtree St., N.E., Atlanta	Active	Fulton
Frank P. Anderson, Jr.	2343 Williams Street, Augusta	Active	Richmond
Jose M. Bahamonde	53 Fourteenth Street, N., Atlanta	Active	Fulton
Loui Garrett Bayne	340 Boulevard, N.E., Atlanta	Active	Fulton
Floyd Edward Bliven, Jr.	Talmadge Memorial Hospital, Augusta	Active	Richmond
Edwin L. Brackney	Talmadge Memorial Hospital, Augusta	Active	Richmond
Avery B. Brinkley	Macon Hospital, Radiology Dept., Macon	Active	Bibb
Joseph L. Caldwell, Jr.	1276 Merry Street, Augusta	Active	Richmond
Arthur John Cook	35 Linden Avenue, N.E., Atlanta	DE 2	Fulton
John Thomas Daves	2001 Gloucester Street, Brunswick	Active	Glynn
William Robert Dunn	Route 1, Cumming	Active	Chattahoochee
Abram O. Goldsmith	811 N. Jefferson St., Albany	Active	Dougherty
Boaz Harris	490 Peachtree St., N.E., Atlanta	Active	Fulton
Harry T. Haugen	2285 Cascade Rd., S.W., Atlanta	Active	Fulton
John M. Herring	Ga. Warm Springs Found., Warm Springs	Active	Meriwether-Harris
Allyn C. Johnson, Jr.	429 Spring Street, Gainesville	Active	Hall
John William Kemble	Talmadge Memorial Hospital, Augusta	Active	Richmond
Paul A. Lavietes	U. S. A. H., Ft. McPherson	DE 4	Fulton
Preston Roy Miller	Sheffield Building, Peachtree Road, Atlanta	Active	Fulton
William H. Moretz	Talmadge Memorial Hospital, Augusta	Active	Richmond
Richard L. Nutt	Milledgeville State Hospital, Milledgeville	Active	Baldwin
Merton Allyn Shure	Baptist Professional Building, Atlanta	Active	Fulton
Zachariah Sweeney Sikes, Jr.	492 New Street, Macon	Active	Bibb
George Williams Smith	Talmadge Hospital, Augusta	Active	Richmond
Robert Juniper Starling	Moseley Clinic, Donalsonville	Active	Decatur-Seminole
Walter Robert Stern	Medical College of Georgia, Athens	Active	Richmond
John E. Steinhaus	36 Butler Street, N.E., Atlanta	Active	Fulton
Alexander Szecsey	Alpharetta Street, Roswell	Active	Fulton
William Glenn Trambly	Smith Memorial Hospital, Lakeland	Active	South Georgia
Victor C. Vaughan, III	Talmadge Memorial Hospital, Augusta	Active	Richmond
Russell Wigh	Talmadge Memorial Hospital, Augusta	Active	Richmond



CANCER PAGE

CANCER SOCIETY SERVICE TO PATIENTS

R. L. Brown, *Atlanta*

A COMBINATION OF compassion and practicality is needed to administer any program of free services to patients. Too much compassion and you bankrupt the program. Too much practicality and some worthy patients might suffer. Too much red tape can delay services to patients.

The Georgia Division of the American Cancer Society makes every effort to maintain a proper balance of compassion and businesslike realism. This page recently was devoted to an appeal by Dr. Enoch Callaway against abuse of narcotics in the treatment of cancer patients. This is one touch of realism we must apply.

It is true that many Georgians, including physicians, do not know the details of The American Cancer Society patient service program. This is true

despite distribution of the blue leaflet describing services, talks at lay and medical meetings, and word-of-mouth information in neighborhoods.

The blue leaflet is being revised and will be given to all physicians for ready reference. Details will show, for instance, that a letter or telephone call to the patient service chairman of any county cancer unit will bring to indigent patients such items as hospital beds or wheelchairs (on loan), bedside comforts, bandages and dressings, or gowns and pajamas. Pain-relieving drugs may be obtained, after investigation, if the attending physician cites the need and the service chairman sends a standard form to the druggist. The limit is \$18 worth per month per patient. Admission to Our Lady of Perpetual Help Free Cancer Home in Atlanta will be arranged by the service chairman, who also arranges for free transportation of needy patients to this home, or to clinics or hospitals for diagnosis or treatment.

On September 12, the Service Committee reported on the services rendered during the Georgia Division's fiscal year, September 1, 1957 through August 31, 1958. This issue of the *Journal* is most timely for disclosing some highlights of the report.

The program provided pain relieving drugs costing \$28,381.82 and transportation costing \$14,793.84. A grant of \$5,000 was made to Our Lady of Perpetual Help for the benefit of terminal patients. The home has 80 beds and is the only home of its type in the Southeast.

Loan items were purchased totaling \$1,672.21. One hundred eleven 10cc vials of testosterone were given to patients, valued at \$1,665. Dressings furnished were valued at \$6,001. Visiting nurse services in the Atlanta metropolitan area cost \$7,200. Visiting nurse services also were provided in Macon and Augusta.

Total cost of the patient services provided from the Division office was \$60,504.57. Figures are incomplete on services provided from other offices and counties in the State but this total probably will be approximately \$30,000.

Approved by Professional Education Committee, Georgia Division, ACS.

Medical Association of Georgia 1959 Annual Session

May 17-20, 1959

Augusta, Georgia

Stephens, F. G.; S. M. Roberts; and M. W. Wolcott, V. A. Hospital, Augusta, Georgia, "Peripheral Lymphangioma of the Lung," *J. Thoracic Surg.* 36:182-184 (August) 1958.

This paper is a case report of a 39 year old white male who revealed an increased density of the left lung on routine chest film. He thought there had been a slight increase in cough. He was, otherwise, asymptomatic. Lesion was localized by planigram in the left lower lung field. Physical examination and skin tests were negative. Exploratory thoractomy was performed with removal of 2 cm. by 2½ cm. cystic lesion, anterior aspect of major fissure. Pathologic examination revealed this to be a lymphangioma.



abstracts by georgia authors

Godwin, J. T., St. Joseph's Infirmary, Atlanta, Georgia, "Validity of Aspiration Biopsy in Cytologic Diagnosis." One of a series of papers presented at the International Symposium on Applied Cytology held in Brussels. (July) 1957.

The purpose of this paper was to discuss the validity of aspiration biopsy. A review of the development of aspiration biopsy was presented with a discussion of the indications for the procedure. The various sites where aspiration biopsy is applicable were mentioned and the results summarized as follows: These figures represent a random single year survey.

Metastatic carcinoma—nodes, soft tissue, bone	90% pos. results
Primary breast carcinoma	78% pos. results
Primary lung carcinoma at thoractomy	72% pos. results
Primary bone tumors	43% pos. results
Other primary sarcomas	33% pos. results
Primary thyroid carcinoma	16% pos. results
Lymphomas	less than 10% pos. results

Discussion was presented by Dr. M. Thiery, Universiti de Gand, Belgium, concerning the use of aspiration in otherwise inaccessible sites of the female genital tract. The importance of this complimentary procedure in obtaining essential information was mentioned by Dr. Thiery.

Fair, John R., Medical College of Georgia, Augusta, Georgia, "Congenital Toxoplasmosis," *Am. J. Ophthalm.* 46:135-154 (August) 1958.

Considerable variations exist in both the neurological and ocular signs of congenital toxoplasmosis. It is suggested that the purely ocular form is the most common variety of the disease and that some cases of chorioretinitis in adults previously thought to be due to acquired toxoplasmosis may actually be instances of congenital infection.

Eight more or less typical cases of congenital toxoplasmosis are described along with twenty-one others in which chorioretinitis is believed to be the only

manifestation of the disease. It is recommended that serologic testing of mothers be included in the investigation of all cases of chorioretinitis in which toxoplasmosis is suspected.

Greenblatt, Robert B., Medical College of Georgia, Augusta, Georgia, "The Evaluation of the Endocrine Patient: Obstetric and Gynecologic," *Am. Pract.* 9:1085-1086 (July) 1958.

Most cases presented to the obstetrician-gynecologist for endocrine evaluation deal with problems of menstruation and conception. A meticulous history will often be revealing. Patients should be queried as to onset of the menarche, menstrual function, development of secondary sex characteristics, problems of infertility or habitual abortion, abnormalities of lactation, and the status of sexual libido. The occurrence of mittelschmerz (mid-menstrual pain) may be correlated with ovulation, basal temperature records, vaginal spotting or bleeding. Pain for a week before and throughout the menstrual period may be suggestive of endometriosis. The passage of endometrial casts is not rare. Hypertrichosis or loss of sexual or head hair are important symptoms. In the climacteric there may be symptoms referable not only to vasomotor disturbances but also to psychogenic and metabolic disorders. Some degree of osteoporosis is often encountered in post-menopausal women. Persistent lactation of galactorrhea demands a search for possible pituitary tumor. The sexual libido may be excessive, as in nymphomania. Frigidity or lack of sexual gratification may be present to account for headaches, tensions, pelvic pains, and other gynecologic disorders.

Some important diagnostic aids in endocrine evaluation from the obstetrical and/or gynecological standpoint are: vaginal cytology studies, endometrial biopsy, study of cervical mucus, basal temperature records, and urinary hormone assays.

Rieser, Charles, 819 Cypress Street, N.E., Atlanta 8, Georgia, "The Unique in Urology," *South. M. J.* 51:665-675 (June) 1958.

The paper deals with seven case reports, each a distinct entity, representing interesting and unique clinical pictures as encountered during the practice of urology.

The first case is that of a neglected renal injury in a female child of 10 years. For 37 subsequent years frequent periodic vomiting defied diagnosis. Complete relief resulted when a calcified sac (left kidney) was removed.

Frequent attacks of renal colic over a period of 12 years were alleviated by abstinence from daily intake of a quart of milk. During these 12 years repeated pyelographic studies showed normal anatomy. No specific calculus had ever been passed.

Persistent pyuria in a four year old female patient following nephrectomy was relieved by ureterectomy at which time the ureters were found to be completely reduplicated. One ureteral orifice was located at the neck of the bladder, the other located in normal position.

An urinary bladder with capacity of over 5000 cc associated with prostatism resulted in near fatal uremia. Resection of 7/8 of the bladder followed by prostatectomy at a later date restored the blood chemistry to normal and the bladder capacity to 12 ounces.

A carcinoma of the prostate in a 41 year old was treated by radical prostatectomy. Eight years later metastatic lesions existed throughout all the bony structures. Nevertheless, he continued to work with minor degrees of incapacity. Control was maintained by endocrine therapy.

A 29 year old male patient with an undescended testis and neurogenic ejaculatory disturbance with retrograde population of the semen produced a pregnancy in his wife by syringe insemination following catheter collection of the semen.

Finally, bilateral neoplasms of the testis, one a teratocarcinoma, the other a capillary hemangioma is reported.



physician's bookshelf

REVIEWS

Gofman, John M., M.D., Alex V. Nichols, Ph.D., and E. Virginia Dobbins, Senior Dietitian, **DIETARY PREVENTION AND TREATMENT OF HEART DISEASE**, G. P. Putnam's Sons, New York, 1958, 265 pp., \$3.95.

IN THIS BOOK Dr. Gofman and his associates outline for the layman their ideas on the importance of dietary restrictions in minimizing arterosclerosis, and then devote the major part of the book to a presentation of the suggested diets.

The first third of the book presents the authors' thesis, which might be summarized roughly as follows: One is more likely to develop coronary disease if one has (1) an elevation of lipoproteins in the SF0-12 and 12-20 range, (2) an elevation of lipoproteins in the SF20-100 and 100-400 range, or (3) obesity. These are three separate problems and for each of these three there is a separate dietary treatment: reduction in (1) animal and lightly saturated vegetable fats, (2) carbohydrates, or (3) total calories, respectively. Early in adult life one should have "the advantage of lipoprotein analysis," so that if an abnormal lipoprotein pattern is present, it can be detected and appropriate dietary treatment instituted.

The last two-thirds of the book is a diet manual describing the three diets noted above. It is well done, but rather complicated.

Many cardiologists will not agree with some of the authors' opinions on this highly controversial subject, but I would think the book could be helpful to dieticians and to patients with more than average intelligence and interest in this field.

Grant Wilmer, M.D.

Wilkner, Abraham, M.D., **THE RELATION OF PSYCHIATRY TO PHARMACOLOGY**, The Williams and Wilkins Company, Baltimore, Md., 270 pp., \$4.00.

THIS BOOK is a review of the literature during the period 1930 to 1955 dealing with the effects of drugs used in psychiatry in the treatment or investigation of "functional" mental illness, the major purpose being an examination of how drug action can be used as a research tool in the study of the dynamics of human behavior. The first section of the book is a description of how drugs have been used and what effects have been ob-

served under clinical conditions. The second section of the book deals with the theories and mechanisms of drug actions, attempting to correlate the changes produced in human behavior with those effected in cerebral metabolism, neural organization, and environmental adaptation.

The author's approach is both scholarly and scientifically objective. It is not a "clinical" book in the sense that it provides usable data for the busy clinician. Rather, it raises more questions than it answers. Although it will be of use primarily to the scientist, its perusal may give the clinician reason to pause in his widespread and frequently indiscriminate use of drugs in the treatment of emotional symptoms.

E. James McCranie, M.D.

Dolger, Henry, M.D., and Bernard Seeman Cloth, **HOW TO LIVE WITH DIABETES**, W. W. Norton & Company, Inc., New York, 1958, 192 pp., \$3.50.

THIS BOOK WAS not intended to be a text book on the management of diabetes. It does discuss diagnosis and treatment, but primarily it is a general discussion of the problems encountered in the life of a diabetic, in terms of the ways in which the disease will affect his physical and emotional problems. There have been many texts written telling the diabetic how to control his insulin, his blood sugar, and his diet. This attempts to explain problems of everyday living.

It may have been wise to have a professional writer who specializes in articles on science and medicine as a co-author of the book. Even so, much of the wording could be simplified to make it more understandable for the mentality of the average diabetic. Many of the medical principles expounded in this book are also open to question by those who advocate a fairly strict control of the diabetic individual. Too much credit is given to an oral preparation for control of blood sugar. This book may prove interesting reading for many, but it should not be regarded too highly when problems of treatment are discussed.

Christopher J. McLoughlin, M.D.

Chusid, Joseph G., M.D., and Joseph J. McDonald, M.D., **CORRELATIVE NEUROANATOMY AND FUNCTIONAL NEUROLOGY**, Lang Medical Publications, Los Altos, California, 1958, 337 pp., \$4.50.

THIS BOOK CONTAINS a wealth of information in easily accessible manner. It consists of an outline of the fundamental facts of anatomy and physiology as used in neurologic diagnosis. It is made up largely of diagrams, charts, and graphs with a minimum of words.

There are three sections dealing with the Central Nervous System, Peripheral Nerves, and Principles of Neurodiagnosis, respectively. The anatomical and physiological diagrams are excellent. Basic facts in regard to electro-encephalography, electro-myography, cystometry, and the like are shown as well as diagrams of landmarks on X-ray study, including cerebral arteriography, and ventriculography. Charts and diagrams on muscle testing, spinal fluid changes, the various nerve plexuses, and many other useful guides can be easily referred to. Diagrams and photographs of common pathologic lesions are shown.

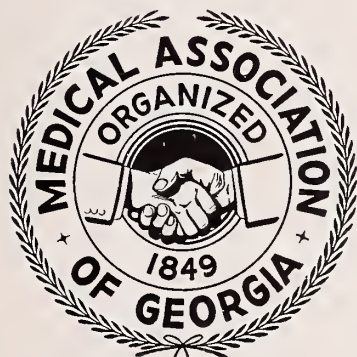
This book has long been popular with medical students and residents and should be a valuable aid to the clinician dealing with problems of the nervous system.

William A. Smith, M.D.

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

1959 Annual Session

May 17-20, 1959—Bon Air Hotel, Augusta, Georgia



Third Call for Scientific Papers

All titles must be submitted to the respective
program chairman listed below before
November 1, 1958.

ANESTHESIOLOGY

A. J. Waters
University Hospital, Augusta

CHEST

Curtis H. Carter
Medical College of Georgia, Augusta

DERMATOLOGY

J. Malcolm Bazemore
1467 Harper Street, Augusta

DIABETES

Nathan DeVaughn
124 Seventh Street, Augusta

EENT

William O. White
1467 Harper Street, Augusta

GENERAL PRACTICE

C. M. Templeton
1333 Harper Street, Augusta

INDUSTRIAL SURGERY

Augustin S. Carswell
1407 Gwinnett Street, Augusta

MEDICINE

Harry T. Harper, Jr.
Medical Arts Building, Augusta
Louis L. Battey
1407 Gwinnett Street, Augusta

OBSTETRICS AND GYNECOLOGY

John T. Persall
1407 Gwinnett Street, Augusta

ORTHOPEDICS

Augustin S. Carswell
1407 Gwinnett Street, Augusta

PATHOLOGY

E. V. Hastings
St. Joseph's Hospital, Augusta

PEDIATRICS

W. A. Wilkes
1453 Harper Street, Augusta

PSYCHIATRY-NEUROLOGY-NEUROSURGERY

E. J. McCranie
Medical College of Georgia, Augusta

RADIOLOGY

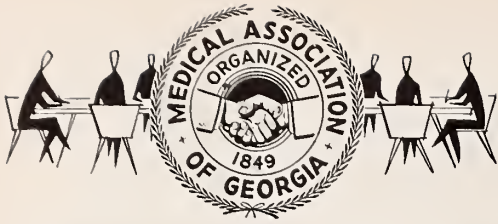
Russell Wigh
Medical College of Georgia, Augusta

SURGERY

Robert G. Ellison
Medical College of Georgia, Augusta

UROLOGY

Robert Rinker
Medical College of Georgia, Augusta



the association

EXECUTIVE COMMITTEE OF COUNCIL MINUTES

THE SEPTEMBER MEETING of the Executive Committee of Council of the Medical Association of Georgia was called to order at 12:30 P.M., Sunday, September 14, 1958 in the Whitmarsh Room, General Oglethorpe Hotel, Savannah, Georgia by Chairman George R. Dillinger, Thomasville.

Members of the Executive Committee present in addition to Dr. Dillinger were Lee Howard, Sr., Savannah, President; Luther H. Wolff, Columbus, President-Elect; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and J. G. McDaniel, Atlanta, Chairman of the Finance Committee. Also present were Speaker of the House Tom Goodwin; Vice Councilor James Hicks; Review Board Chairman Charles S. Jones; Glynn County representative Joe Mercer; Messrs. Milton D. Krueger, John F. Kiser, John D. Arndt; and Mrs. Emily Grinalds of the Headquarters office.

The first item of business was a report by the State Medicare Review Board presented by Charles S. Jones, Atlanta.

Dr. Jones reported on the Review Board meeting held Saturday, September 13th and also reported on a recent meeting with Senator Russell concerning the possibility of obtaining an indemnity type program under Medicare.

On motion (Wolff-McLoughlin) it was voted to commend Dr. Jones for his efforts and to table the matter for the time being of pursuing an indemnity type program with Senator Russell.

Dr. Mercer brought up the matter of publishing the maximum fee schedule for all physicians in Georgia. Dr. Mercer then stated at great length that he felt it would be in the best interests for the physicians in Georgia for the maximum fee schedule to be published.

Dr. Jones, Mr. Arndt, and others expressed their views and explained the policy of the Executive Committee in not publishing the Medicare maximum schedule.

On motion (Howard-McDaniel) it was voted to continue the Medicare program as before without publishing the maximum fee schedule.

Dr. Jones then stated that he wished to resign as Chairman of the Medicare Review Board after having served for almost two years. He stated he would be

willing, if necessary, to serve as a member of the Review Board, but not as its Chairman.

On motion (McDaniel-Wolff) it was voted to accept Dr. Jones' resignation with regret.

Several names of Atlanta physicians were suggested as successors to Dr. Jones and on motion (Wolff-McLoughlin) it was voted to take these names that had been nominated and for the Secretary, Treasurer and Chairman of the Finance Committee to contact these names and persuade one of them to accept the position as Chairman of the Review Board.

Dr. Jones then presented a problem in connection with the Medicare program having to do with a physician in Columbus for information only.

H.E.W. Appointment

Mr. Krueger presented a letter from the U. S. Department of Health, Education, and Welfare in regard to procurement of an Atlanta Board internist as special advisor under the OASI total disability program. On motion (McDaniel-Wolff) it was voted that Dr. McLoughlin submit the names of five Atlanta internists to be considered for this position.

Relations with Podiatrists

Dr. McLoughlin presented a letter from the Coffee County Medical Society concerning medical relationships with doctors of podiatry. Following discussion, on motion (Wolff-McDaniel) it was voted that the Executive Committee of Council go on record as opposed to the treatment of fractures by podiatrists.

Floyd County Medical Society Legal Request

Dr. McLoughlin presented a letter from the Floyd County Medical Society asking whether the society should become involved in a legal matter concerning an individual physician member of the society. Following discussion, on motion (Wolff-McDaniel) it was voted to inform the Floyd County Medical Society that it is the opinion of the Executive Committee of Council that no action should be taken by the society at the present time.

There being no unfinished or new business, it was voted (McDaniel-Wolff) that the October meeting of the Executive Committee of Council should be set by the Chairman at a later date.

There being no further business the meeting was adjourned.

MINUTES OF MAG COUNCIL MEETING SEPTEMBER 13, 14

CHAIRMAN OF COUNCIL, George R. Dillinger, called the Council of the Medical Association of Georgia to order at 3:15 P.M., September 13, 1958 in the Whitmarsh Room, General Oglethorpe Hotel, Savannah, Georgia.

Council members present included: Lee Howard, Sr., Savannah, President; Luther Wolff, Columbus, President-Elect; George L. Alexander, Forsyth, 1st Vice President; Charles W. Hock, Augusta, 2nd Vice President; Thomas W. Goodwin, Augusta, Speaker of the

House; Chris J. McLoughlin, Atlanta, Secretary; Charles T. Brown, Guyton, 1st District; George R. Dillinger, Thomasville, 2nd District; W. G. Elliott, Cuthbert, 3rd District; Virgil B. Williams, Griffin, 4th District; J. G. McDaniel, Atlanta, 5th District; Henry H. Tift, Macon, 6th District; D. Lloyd Wood, Dalton, 7th District; E. G. Eldridge, Valdosta, 8th District; and C. R. Andrews, Canton, 9th District.

Vice-Councilors present included: James M. Hicks, Brunswick, 8th District and Paul T. Scoggins, Commerce, 9th District. Messrs. M. D. Krueger and John F. Kiser and Mrs. Emily Grinalds of the Headquarters Office Staff were also present. Joseph Mercer, President, Brunswick County Medical Society, was also in attendance.

Chairman Dillinger called on Thomas Goodwin who delivered the invocation.

Chairman Dillinger then called on Mr. Krueger who read the minutes of the July 12-13, 1958 meeting of the Council of the Medical Association of Georgia and these minutes were approved as read. Mr. Krueger then read the minutes of the Executive Committee of Council meeting August 15, 1958 and on motion duly made and seconded the minutes were corrected and approved.

Poison Control Program Appointment

President Lee Howard reported on a communication dated August 25 concerning a request from the Director of the State Department of Health Dr. T. F. Sellers, for the appointment of a representative from the MAG to serve on a panel advising the Department of Health on their Poison Control Program. Dr. Howard reported that Dr. Charles A. LaMaistre, Chairman of the Department of Preventative Medicine and Community Health, Emory University School of Medicine, had been appointed as the MAG representative.

AMA News Correspondent Appointment

Chairman Dillinger called on Associate Executive Secretary, Mr. John F. Kiser who reported that the *AMA News* editor requested the MAG to appoint an Atlanta newspaper man as the *AMA News* Correspondent. After discussion of this matter, on motion (Alexander-Elliott) it was voted that this appointment be left to the discretion of the Executive Committee of Council.

Griffin Health Department Problem

Chairman Dillinger called on 4th District Councilor Virgil Williams who presented data for information only on the recent discharge of the M.D. Health Officer in Spalding County. Dr. Williams stated that further action on this matter would be taken at the local level at a meeting scheduled for Wednesday, September 17 to adjudicate this problem.

Atlanta Journal October Supplementary Issue

Chairman Dillinger called on Mr. Krueger who reported that he had been contacted by the advertising personnel of the *Atlanta Journal* concerning the possibility of an MAG institutional advertisement in a supplemental section of the *Atlanta Journal* titled "Face and the Future of Georgia." This matter was referred to John Heard, Chairman of the MAG Public Service Committee, and his views were presented. Secretary McLoughlin also discussed this matter. On mo-

tion (Goodwin-Tift) it was voted to not contract for such advertising in this *Atlanta Journal* supplement but to instruct the Headquarters Office to cooperate with the science writers of the *Atlanta Journal* in making available any medical copy for this supplement if requested.

Medical Ethics Report

Chairman Dillinger called on 1st District Councilor Charles T. Brown, who reported on the professional conduct problem investigation conducted by Dr. Brown. Dr. Brown outlined the problem concerning a physician within his district and stated that the County Medical Society having jurisdiction over this doctor disqualified itself from adjudicating this matter because the physician was an official of the society and there were only two other members of this society. Dr. Brown then reported that because of this disqualification by the society, the problem had been referred to the MAG Professional Conduct Committee and that the MAG Professional Conduct Committee was meeting on this matter within the next few weeks. This report was accepted for information.

AMA Industrial Health Meeting, Cincinnati, February 16, 1959

Chairman Dillinger called on Mr. Krueger who reported on a request from the Chairman of the AMA Council on Industrial Health received in a communication of July 18, 1958. This request concerned the urging by AMA that MAG request its Industrial Health Committee Chairman to attend the Industrial Health Meeting Scheduled for January 16, 1959, Cincinnati, Ohio and pay his expenses to such a meeting. In the discussion it was brought out that such an item can be covered in the appropriation given the Industrial Health Committee of the calendar year 1959. On motion (McDaniel-Elliott) it was moved that the MAG underwrite the expenses concerned with the Industrial Health Committee Chairman's attendance at this meeting and that T. A. Peterson, Chairman of the MAG Industrial Health Committee, be asked to attend this meeting.

MAG Council Building Committee Report

Chairman Dillinger called on Chris J. McLoughlin, Chairman of the Council Building Committee, who reported on the status and progress of his Committee in negotiating the purchase of a suitable MAG Headquarters Office Building.

It was also moved (McDaniel-McLoughlin) and voted that should the negotiation for the purchase of a building as proposed by MAG be acceptable, the MAG House of Delegates be called into Special Session so that Council might present to the MAG House of Delegates for approval the MAG purchase of this building before the final purchase.

1959 Augusta Annual Session Report

Chairman Dillinger called on Henry Tift, Chairman of the Annual Session Committee, who reported on the Scientific program and commercial exhibits set up for the 1959 MAG Augusta Annual Session, May 17-20, 1959, Augusta, Georgia. Dr. Tift reported that the 17 specialty society chairmen had met and that the section meetings and joint section meetings had been arranged for the scientific program. Dr. Tift also stated that a floor plan had been drawn for scientific and

commercial exhibit booths. Dr. Tift further reported that Dr. Lewis Orr, President-Elect of the American Medical Association, had accepted the MAG invitation to address the first general session scheduled to convene Monday, May 18, 1959 and Dr. Tift reported that he regretted that Dr. F. J. L. Blasingame, Executive Vice-President of the AMA, was unable to accept the MAG invitation to address the Association's House of Delegates at the MAG Annual Meeting.

Standardization of Insurance Forms Committee Report

Chairman Dillinger called on Joseph Mercer, Chairman of the Council Committee on Standardization of Insurance Forms, who reported on the progress and activities of his committee. Dr. Mercer presented his Committee's recommendations as follows:

(1) "On motion duly made and seconded it was recommended that in cases of 'pure' hospitalization, the insurance data for the hospitalization insurance forms be provided by the hospital from the hospital chart, and it is not necessary for a physician to validate this information with his signature.

(2) "It was also recommended that in the case of medical or surgical coverage insurance policies, a standard form be recommended and that the physicians use this standard form in all medical and surgical claim cases; the physician attaching this standard form to the company form. The standard would state that if any additional information was necessary the firm may obtain such from a doctor at a minimum charge.

(3) "On motion duly made and seconded it was recommended to MAG Council that the Medical Association of Georgia notify the Georgia State Association of Life Underwriters, Mr. George Conner, Executive Secretary, 202 Peachtree Arcade, Atlanta 3, Georgia, that a copy of the death certificate should be considered sufficient 'proof of death' for the insurance company; that any further information required would be considered an investigation for the company and physicians will charge \$5.00 for filling out any special forms for the company. The M.D. will bill the company directly for this service.

(4) "The Committee further recommended that such standard industrial (weekly) claim forms be adopted, and the Committee design such a form for presentation to the Council."

Dr. Mercer then presented the drafted "Attending Physician's Statement" referred to in Item II of his Committee's recommendation and also presented "a standard industrial (weekly) claim form" referred to in Item IV of his Committee's recommendation. Discussion and explanation of these forms and the recommendations of his Committee then ensued. At this time, because of lack of certain supporting data, the Chairman deferred further discussion of this matter until the reconvened session of the Council on the next day, September 14.

Georgia Hospital-Medical Mediation Council Report

Chairman Dillinger called on Mr. Krueger for a report on the activity of the Georgia Hospital-Medical Mediation Council. Mr. Krueger reported that this group composed of representatives of nine organizations concerned with patient-care in the hospital, held their second meeting September 7, 1958 and discussed the two following items of business. The first item was the adoption of a draft letter announcing the purpose and availability of this Council to mediate hospital disputes at the request of all parties concerned. The group adopted a letter stating this purpose that will be sent to the Presidents and Secretaries of the MAG County Medical Societies, the Presidents and Secretaries of the 17 Specialty Societies, the Association of Hospital Governing Boards, and Hospital Administrators in Georgia. The second purpose of this meeting was to tentatively formulate an educational program of establishing minimum standards for smaller hospitals, both professional and administrative. These standards will be discussed at this group's next meeting. Mr. Krueger then reported that at the inception of this Georgia Hospital-Medical Mediation Council it was hoped that the Georgia Hospital Association and the Medical Association of Georgia would each contribute \$100 to sustain the secretarial activity of this group. On motion (Goodwin-Hock) it was voted that the Medical Association of Georgia contribute \$100 for secretarial services as requested and that this money be charged to the Hospital Relations Committee appropriation.

Clarkesville Laboratory School Investigation

Chairman Dillinger called on D. Lloyd Wood, Chairman of the Council Clarkesville Laboratory School Committee. Dr. Wood reported that his Committee would meet within the next two months to investigate the extent and activity of the course of study given at the Clarkesville Laboratory School as requested by the 1958 House of Delegates. Dr. Wood stated that this school had not been active during the summer, but now that they were in session, he would have a further report at the next meeting of Council. This report was received for information.

Chairman Dillinger then recessed the September 13th Council meeting at 5:30 P.M. and announced that the Council would reconvene at 8:00 A.M., September 14th.

Reconvened Session

Chairman of the Council of the Medical Association of Georgia George Dillinger called the recessed September 13th meeting of Council to order at 8:05 A.M., September 14, 1958 in the Whitmarsh Room, General Oglethorpe Hotel, Savannah, Georgia.

Chairman Dillinger gave the invocation.

In addition to those members of Council present Saturday, September 13th were: Charles S. Jones, Atlanta, 5th District Vice-Councilor; David R. Thomas, Jr., Augusta, 10th District Vice-Councilor, and Mr. John Arndt, MAG Headquarters Office Medicare Administrator.

1960 MAG Annual Session Site and Date

Chairman Dillinger called on President-Elect Luther Wolff who reported that the Muscogee County Medical

Society wished to invite the MAG to hold their 1960 Annual meeting in Columbus, Georgia. Dr. Wolff presented data concerning the adequacy of Columbus to act as host for this session. By general agreement, it was recommended that the date of this meeting be mid-April or early May, 1960. On motion (McDaniel-Elliott) it was voted to convene the 1960 Annual Session of the Medical Association of Georgia in Columbus, Georgia. Also on motion (Goodwin-Williams) it was voted to extend the Council's thanks to Muscogee County Medical Society on behalf of the Association members for this most gracious invitation.

Council Finance Committee Report

Chairman Dillinger called on J. G. McDaniel, Chairman of the Council Committee on Finance, who reported on the 1958 budget with the monthly tabulation of income and expenditures. On motion duly made and seconded it was voted to commend the Chairman of the Council Committee on Finance for his excellent monthly budget report. Dr. Eldridge then discussed the possibility of distributing the monthly budget report to the voting members of Council between meetings of Council on a monthly basis. After discussion on motion (Eldridge-McDaniel) it was voted to send the 17 voting members of Council a copy of the monthly budget report as prepared by Council Committee on Finance Chairman McDaniel. Dr. McDaniel then presented data concerning a firm exhibiting with the Association at the 1958 Annual Session. This firm's representative has not remitted the cost of the commercial exhibit booth to the Association. After discussion it was moved (Jones-Eldridge) and voted that this firm be advised that until such time as they recognize their responsibility in this matter this firm or its representatives would be not permitted to place any advertising in the *MAG Journal* or be acceptable for exhibiting at meetings of the Medical Association of Georgia. The motion further stated that the Association should continue its present policy in contracting with commercial exhibitors at annual sessions as in the past.

Interprofessional Council Report

Chairman Dillinger called on Chris J. McLoughlin, MAG representative on the Georgia Interprofessional Council. Dr. McLoughlin requested Council's approval of a letter to the pharmaceutical industry concerning the promiscuous sampling in stock packages. The contents of this letter were thoroughly discussed and on motion (Thomas-Alexander) it was voted to approve this open letter to all manufacturers of pharmaceutical industries concerning the promiscuous sampling in stock packages practiced by some of these firms.

County Medical Society Jurisdiction Problem

Chairman Dillinger called on Mr. Kiser who presented a request from a physician to belong to an adjacent county medical society other than the adjacent society already having jurisdiction over the county in which the physician resides. This problem was discussed and in the discussion it was brought out that this type problem merited individual consideration and in itself would not set precedent. The Constitution and By-Laws stating that the physician should belong to the county society on his dominant practice was discussed by Council. On motion (Goodwin-Elliott) it was voted to permit this physician to join the County Medical

Society of his choice, in that the hospital used by this physician is within the jurisdiction of the County Medical Society the physician has chosen.

Headquarters Office Report

Chairman Dillinger called on Mr. Krueger who reported on the activity of the Headquarters Office. Mr. Krueger reviewed the personnel staffing the Headquarters Office, their position, and their activity in that position.

Mr. Krueger then reported on the need for certain office equipment as follows: one bank of addressograph trays; two magazine racks charged to MAG; and equipment for Medicare as follows: 1 four drawer legal size file cabinet; one conference table; and one secretarial chair. Mr. Krueger stated that the Medicare equipment, although paid for by MAG, would be depreciated at government expense on a ten year basis as is other Medicare equipment. On motion (Alexander-Wililams) it was voted to approve the purchase of this equipment; said purchase to be charged to equipment appropriation in the budget.

Mr. Krueger then reported on the status and progress of the activity of the Headquarters Office during the months of August and September discussing the following subjects: Professional Liability; GAGP 10th Annual Session; MAG 1959 Annual Session; "Doc MAG Says"; Committee Chairman Visitation Program; Georgia Plan September drive; AMEF County Medical Society Secretary's drive; the county medical society Visitation Program; Physician Placement; and Maternal and Infant Welfare continuing mortality and morbidity study.

Mr. Krueger then discussed the communication of July 10 from F. J. L. Blassingame asking that Mr. Krueger be allowed to accept the appointment of the American Medical Association to serve on the AMA Public Relations Advisory Committee for a three year term of office attending four meetings per year at AMA expense. On motion duly made and seconded it was unanimously approved that Mr. Krueger accept this appointment and Mr. Krueger was commended for being selected to serve in this capacity.

Workmen's Compensation Fee Schedule Report

Chairman Dillinger called on Mr. Krueger who reported on behalf of T. A. Peterson, Chairman of the MAG Industrial Health Committee, on the progress and status of that Committee's activity in meeting with the State Board of Workmen's Compensation as requested by Council on July 12-13, 1958. Mr. Krueger reported that Dr. Peterson had contacted the State Board of Workmen's Compensation and that such a meeting would be held Monday, October 13, 1958 at 1:00 P.M. with the members of the State Board of Workmen's Compensation. This report was accepted for information.

Standardization of Insurance Forms Committee Report (Continued)

Chairman Dillinger again called on Joseph Mercer, Chairman of the Council Committee on Standardization of Insurance Forms. Dr. Mercer continued his presentation of the previous day on the four items recommended by his committee. On motion (Hock-Wood) it was moved that these four recommendations of the Standardization of Insurance Forms Committee

be put into effect as so approved. Discussion then ensued and Dr. Jones amended the original motion to read: that representatives of the MAG Council communicate with members of the insurance industry reporting to them that these forms have been approved by the MAG Council and, further, that MAG urges these forms be accepted by the insurance industry at the earliest date possible. Chairman Dillinger called for a discussion of the amended motion and a substitute motion was (Wolff-McLoughlin) that Council tentatively approve these forms and refer them to the Insurance and Economics Committee for consultation with the insurance industry and that final action be taken on this matter at the next meeting. This substitute motion was approved by a 7-4 vote. The original motion and the amendment were then withdrawn.

Insurance and Economics Committee Report

Chairman Dillinger called on David R. Thomas, Chairman of the MAG Insurance and Economics Committee, who reported on matters referred to his Committee for action. Dr. Thomas discussed all aspects of the investigation of the Bankers Fidelity Life Insurance Company and reported on the Council resolution of July 13-14 sent to the President of this firm with a copy to Mr. Zack Cravy, State Insurance Commissioner. Dr. Thomas recommended a meeting with Mr. Cravy on certain aspects of this resolution in which Mr. Cravy requested further information therein. On motion (Wolff-Williams) it was voted that The Council of the Medical Association of Georgia meet with Mr. Cravy on this matter and the Chairman and Co-Chairman of the MAG Insurance and Economics Committee prepare the MAG presentation to Mr. Cravy in conjunction with the MAG attorney. The motion further stated that any interested parties in this matter be invited to attend this meeting and that this meeting be convened as a Special Meeting of Council at the call of the Chairman.

Dr. Thomas then reported on the Welfare Department fee schedule investigation referred to his Committee by Council and stated that as yet his Committee had not taken this matter under consideration. Dr. Thomas said his Committee would meet early in October to discuss the aspects of this Welfare Department fee schedule concerning the Council. Dr. Thomas further stated that the MAG Retirement Fund investigation by the House of Delegates would also be taken under advisement by his Committee at their October meeting.

Dr. Thomas then recommended that the Association cooperate more closely with the Provident Life and Accident Insurance Company in promoting certain plans underwritten by this Company on a group basis for Association members. To this end Dr. Thomas suggested that: (1) a series of editorials be run in the *Journal of the Medical Association of Georgia* calling to the members attention the advantages of these group plans for MAG members; (2) that Mr. Kiser and Mr. Krueger present data about these plans to the county medical

societies in the course of their county medical societies Visitation Program; and (3) that the Association cooperate with Provident in mailing direct to the members data about these insurance programs; said data to be carried on MAG letterhead, as a letter from the President of MAG and so signed by the President. On motion duly made and seconded the above three suggestions of Dr. Thomas were approved.

Medicare Report

Chairman Dillinger called on Charles S. Jones, Chairman of the Medicare Review Board, for a report on the status and activity of the Medicare Program in Georgia. Dr. Jones reported on the MAG Indemnity Proposal meeting with Senator Russell and stated that Senator Russell had acted in behalf of the Association but that the action met with opposition from the Department of Defense. Dr. Jones then stated that the Department of Defense Medicare Advisory Committee is meeting in Washington, September 19th to further consider the MAG Indemnity Proposal made to this same committee by MAG at an earlier date. Dr. Jones said that as yet the Association had not been invited to attend this meeting. Dr. Jones then reported on the September 2 Department of Defense Medicare restrictions effective October 1, 1958 and stated that a Medicare Review Board meeting had been held September 13 at which time these restrictions were discussed and explained. This report was discussed and received as information and Dr. Jones was commended for his activity in behalf of the MAG.

AMA Public Relations Institute Report

Chairman Dillinger called on Chris J. McLoughlin, Secretary, who reported in behalf of John Heard, Chairman of the Association Public Service Committee on the recent AMA Public Relations Institute. Dr. McLoughlin reported that he had attended the AMA Public Relations Institute, August 27-28, Chicago and discussed the program of this two-day meeting. This report was received as information.

Southeastern Presidents, Secretaries, and Executive Secretaries Organization

Chairman Dillinger called on Mr. Krueger who reported in behalf of Eustace Allen on the investigation and possibility of establishing a Southeastern Presidents, Secretaries, and Executive Secretaries Conference to meet and discuss mutual problems in the medical field. Mr. Krueger reported that Dr. Allen had not as yet finished surveying whether or not other states in the Southeast thought this to be a good idea. Mr. Krueger said that Dr. Allen would report further on this matter at the December Council meeting.

Unfinished Business

Chairman Dillinger then called for unfinished business and the items brought to the attention of Council were as follows:

Distinguished Service Award—Chris J. McLoughlin, Secretary, reported on investigation of a medallion made by Dr. Poer. Dr. Poer's report described a medallion in which the original die mold of the State Association seal on the front and a caduceus emblem with "Award for Distinguished Service" and the physician's name imprinted would cost approximately \$585, and the medals struck would cost between \$170 and

\$800 each. Dr. McLoughlin then presented an alternate plan by which a wooden plaque with a metal plate carrying engraving and another metal plate of the Association seal would be awarded the physician receiving the Distinguished Service Award. To effect this plan, a die mold of the MAG seal would cost approximately \$150; the mounting of the seal on the wooden plaque would cost \$2, the wooden plaque with another plate for engraving underneath the seal would cost \$20, and engraving on the plate would cost .06 per letter. On motion (Wolff-Elliott) it was voted to proceed with the plan of obtaining a wooden plaque as the presentation for the Distinguished Service Award and the cost of such plaque to be charged to the contingent fund.

President's Desk—President Lee Howard then proposed that as the President of the Association would be in the Headquarters Office once a week, it might be appropriate to provide the President with a desk, chair, and file cabinet so that he might carry on the affairs of the Association in the Headquarters office. Dr. Howard stated that this desk could also be used by Secretary McLoughlin. On motion duly made and seconded it was voted to purchase a President's desk, chair, and a file cabinet and that this be charged to the equipment appropriation and, further, that if that appropriation proved inadequate, the balance of the cost of this purchase should be charged to the contingent fund.

New Business

Chairman Dillinger then called for new business and the items concluded by the Council were as follows:

Tuberculosis Association Letter—W. G. Elliott presented to the Council a letter concerning the physicians of Georgia in connection with the Tuberculosis Association and requested approval of this letter for distribution. On motion (Wolff-Brown) it was voted to approve this letter. Dr. Elliott thanked the Council members for their confidence and approval.

Insurance Board Georgia Plan—W. G. Elliott reported as requested by Council that he had visited a physician who allegedly gave certain MAG Insurance information to sources outside the medical field. Dr. Elliott reported that the physician was certainly not at fault and the Council by general agreement moved the matter be tabled as the allegation proved unsubstantiated.

Mid-Wife Letter—Mr. Krueger presented a request from the State Department of Health for Council approval of publication in the *Journal of the Medical Association of Georgia* a "Suggested Guide for Physicians signing Certificates of Safety for Delivery by Certified Mid-Wives." Mr. Krueger stated that Maternal and Infant Welfare Committee Chairman Charles Mulherin had recommended that this guide be published. On motion (Goodwin-Hock) it was voted that this "Suggested Guide For Physicians Signing Certificates of Safety by Certified Mid-Wives" be published in the *Journal of the Medical Association of Georgia* in an early issue of the *Journal*.

MAG Seal—Dr. McLoughlin presented a rough drawing of a revised MAG seal showing a caduceus in the center of the seal rather than the "handshake" in the present MAG seal. Discussion of the change in the seal ensued and Mr. Krueger read Article XII of the MAG Constitution which reads as follows: "The Association should have a common seal. The power to

change or renew the seal shall rest with the House of Delegates." After discussion on motion (Goodwin-Elliott) it was voted that Council approve and recommend to the House of Delegates a change in the MAG seal so that a caduceus may be incorporated in the center of the seal rather than the present "handshake" symbol.

Date of Future MAG Meeting—Chris J. McLoughlin proposed that the date of future annual meetings be set for a permanent week of the month starting on the Sunday of that week. On motion (Howard-Hock) it was voted that future annual sessions after 1959 be held on the first Sunday in May.

Council Appreciation to Dr. and Mrs. Howard—On general motion and by a rising vote of thanks, the Council members unanimously expressed appreciation to Dr. and Mrs. Lee Howard, Sr. on the occasion of their most gracious hospitality at this Council meeting. The Executive Secretary was instructed to write Dr. and Mrs. Howard and express these sentiments to them in behalf of the Council.

There being no further business Dr. Dillinger called the meeting adjourned on motion duly made and seconded.

EXECUTIVE COMMITTEE OF COUNCIL PHONE CALL CONFERENCE

CHAIRMAN OF COUNCIL George R. Dillinger, Thomasville, called the Executive Committee of Council phone call conference meeting to order at 5:20 P.M., August 15, 1958.

Executive Committee of Council members present included: Lee Howard, Sr., Savannah, President; Luther Wolff, Columbus, President-Elect; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; George R. Dillinger, Thomasville, Chairman of Council; and J. G. McDaniel, Atlanta, Chairman of Finance. Mr. M. D. Krueger, MAG Executive Secretary was also present.

Building Committee Report

Chairman Dillinger called on Dr. Chris J. McLoughlin, MAG Building Committee Chairman, to report on the progress concerning the proposed MAG Headquarters Office.

Medicare Report

Chairman Dillinger called on Mr. Krueger who reported for Medicare Review Board Chairman Charles Jones on the status of Medicare. Mr. Krueger reported on the recent Department of Defense proposed restrictions on the present Medicare program. Mr. Krueger stated that Mr. John F. Kiser represented the Association at the request of the MAG Medicare Review Board Chairman in attending a Department of Defense meeting August 8 held in Washington, D. C., at which time officials of the Department of Defense discussed with representatives and contractors from the 48 states certain restrictions and "cuts" in the present Medicare program. Mr. Krueger further stated that nothing "official" transpired at this Washington meeting, but that the government would formulate these restrictions

and send them to the 48 states on September 1; these restrictions to be effective October 1, 1958.

Mr. Krueger then reported on an exchange of correspondence addressed to W. Bruce Schaefer from the Honorable Senator Richard Russell concerning the Association's presentation to Senator Russell. Association representatives explained to Senator Russell the Association's request for an "indemnity-type" Medicare program.

Mr. Krueger then stated the request of Medicare Review Board Chairman Charles Jones for a meeting of the Executive Committee at the earliest date so that Dr. Jones could explain to Executive Committee the curtailments proposed by the government in the Medicare program and have the position of the Association clarified in regard to an "indemnity-type" Medicare program as discussed with Senator Russell. Mr. Krueger also stated that Dr. Jones wished this meeting so that the Executive Committee could set policy on these items. Mr. Krueger further stated that Dr. Jones wished this policy set prior to September 19 at which time the Association would be invited to send a representative to Washington to discuss with the Medicare Advisory Committee the previously proposed MAG indemnity-type Medicare program.

On motion duly made and seconded, it was voted that such a meeting be held at the time of the September 13-14 Council meeting and, further, that the members of Executive Committee receive copies of the "Senator Russell correspondence," the September 1 Department of Defense regulation for the restriction of certain aspects of the present Medicare program, and a narrative account of the Washington meeting on this subject. (See date and site of September Executive Committee of Council meeting set at the request of the Review Board Chairman to discuss the above matters more fully and set MAG policy.)

Headquarters Office Monthly Report

Chairman Dillinger called on Mr. Krueger for the monthly report of the Headquarters Office activity. Mr. Krueger stated that this monthly report would merely concern itself with personnel problems because of the nature and brevity of time in this phone call conference meeting. Mr. Krueger informed the members of the Executive Committee of Council that Mrs. Mulligan, MAG secretary, had resigned as a Headquarters Office employee, effective August 22, 1958, and that some 17 applicants had been interviewed to fill this position. Mr. Krueger discussed two of these applicants briefly, and on motion (McDaniel-Wolff) it was voted to employ Mrs. Jeanette Bowman as a replacement for Mrs. Mulligan. Mr. Krueger then stated that one of the other applicants seemingly had the qualifications for an Executive Assistant to Mr. Krueger and Mr. Kiser. Chris J. McLoughlin recommended that, if still available, this other applicant be so employed as previously authorized by Council. On promotion duly made and seconded, it was voted to approve the employment of an Executive Assistant to Mr. Krueger

and Mr. Kiser, and if this applicant was not available, to continue interviewing to fill this position. Mr. Krueger then stated that Mr. John Arndt, Medicare Administrator, had recommended that in view of the increased efficiency in the Medicare fiscal operation, and in view of the proposed Department of Defense curtailment of some aspects of the present Medicare program, the Medicare Administrator's position be put on an approximately one-half time basis as soon as possible. On motion duly made and seconded, it was voted to allow Mr. Arndt, at his option, to apportion his time as Medicare Administrator on an approximately half-time basis (compensated on the basis of an hourly rate equivalent to his present annual salary) to be effective September 15, 1958 and, further, that in this arrangement Mr. Arndt still remain as Medicare Administrator with the full responsibility and authority for the administration of the Medicare program under direction of the Medicare Review Board Chairman as defined by the Executive Committee of Council.

Date and Site of Next Executive Committee of Council Meeting

On motion duly made and seconded, it was voted that the Executive Committee of Council would meet September 14, 1958, General Oglethorpe Hotel, Savannah, immediately following the MAG Council meeting to discuss Medicare problems and other items of business.

Chiropodists-Podiatry

Chairman Dillinger called on Secretary McLoughlin who presented a communication of August 13 from Dr. C. J. Pompei, President of the Georgia Association of Chiropodists in which Dr. Pompei asked for a list of names and addresses of the members of the Medical Association of Georgia so that he might mail an announcement informing the doctors of Georgia of the change in professional designation from Chiropodists to Podiatry. Secretary McLoughlin recommended that such a list be sent and that Dr. Pompei be advised that if he wished envelopes addressed with the names and addresses of the doctors of Georgia, the Headquarters Office cooperate with Dr. Pompei to this extent. On motion duly made and seconded it was voted to send a roster to Dr. Pompei and also inform Dr. Pompei that if he wished the Association to address his envelopes for him, the Headquarters Office would be so instructed.

Chairman Dillinger then called for further business and there being none, on motion (Howard-Wolff) the meeting was adjourned.

MEDICARE RESTRICTIONS

BY ORDER OF the Department of Defense as directed by Congress, the Medicare program is scheduled for some vast changes effective on and after October 1, 1958. Although the effect of these changes cannot be accurately forecast due to many variables, the author will attempt to estimate how Georgia's current annual Medicare volume of \$1,500,000.00 on the basis of 24,000 claims will be altered.

The restrictions were required by Congress as Medicare's annual combined physician and hospital charges

of \$90,000,000 greatly exceeded the budgeted \$60,000,000. Also, Congress felt that Medicare had to be restricted to assure optimum utilization of uniformed services medical facilities.

Specifically the restrictions are as follows (for a more detailed explanation see Directive Medicare VII, September 3, 1958.):

1. Spouses and children *residing apart* from sponsors will continue to have freedom of choice for authorized care. (See paragraph 3 below for care no longer authorized.)

2. Spouses and children *residing with* sponsors will be required to utilize uniformed services medical facilities if available and adequate as determined by the commander of the medical facility. When facilities are not available, a PERMIT will be furnished the dependent. This PERMIT will entitle them to receive the authorized care from civilian sources at government expense *if, and only if*, such care is authorized care under the newly restricted program. (See paragraph 3 below for care no longer authorized.) PERMITS must be attached to the claim form. PERMITS may not be required in certain cases of bona fide acute emergencies, when patient is on a trip, or when a maternity case is under the care of a civilian physician on or before October 1, 1958 and is continued by that physician provided the patient has reached the second trimester by that date.

3. The following *care is no longer authorized* care under the civilian part of the Medicare program whether the patient resides with or apart from the sponsor or whether the patient does or does not have a PERMIT.

(a) Treatment of fractures, dislocations, lacerations, and other wounds on an outpatient basis.

(b) The termination visit as set forth under Code 0042 of the Medicare Manual.

(c) Outpatient pre and post-surgical tests and procedures.

(d) The two home or office neo-natal visits within the first 60 days of life.

(e) Treatment of acute emotional disorders.

(f) Elective surgery.

The provisions set forth above are brief. Directive Medicare VII must be consulted for details.

Some of the variables to be considered in calculating the effect of the above are: (1) the number of dependents residing with their sponsor, (2) the capacity and adequacy of uniformed service facilities, and (3) the amount of care no longer authorized. If values can be assigned these variables, we can determine the effect.

An analysis of 12,000 claims for the period October 1, 1957, through March 31, 1958, reveals that in Georgia 73 per cent of the Medicare patients *resided with* their sponsors.

We have been informed that the current capacity of existing uniformed services facilities varies from 40 beds at one installation to 500 beds at another. The total mobilization capacity varies from a low of 634 beds for one installation to another installation's high of 1246 beds. Let us assume that uniformed services facilities will not be able to accommodate ten per cent of the current Medicare patient-load. This percentage will vary from community to community.

It is further estimated that elimination of the care described in paragraph 3 above will reduce the patient-load in civilian sources by about 20 per cent.

Therefore, the civilian phase of the Medicare program in Georgia *will be reduced by approximately 70.4 per cent of its current volume*. This is determined as follows: It appears that the 27 per cent residing apart from the sponsor will use civilian sources of care. Another 10 per cent will probably be furnished PERMITS yielding a total of 37 per cent eligible for civilian care. But as 20 per cent of the former care is no longer authorized, only 80 per cent of 37 per cent, or 29.6 per cent of the eligible dependents will receive care from civilian sources at government expense. As only 29.6 per cent of the current Medicare patient-load will be eligible for treatment, *a reduction of 70.4 per cent will be experienced*.

Conclusion

It seems reasonable to conclude that about 70 per cent of the civilian phase of the Medicare program has been eliminated effective on and after October 1, 1958. Physicians must be exceedingly careful to determine: (1) Is the patient eligible for civilian care as evidenced by the Medical Authorization Card? (2) If eligible for care, is a PERMIT needed and does the patient have one to be attached to the claim form? (3) If eligible for care, is the care requested still authorized care at government expense?

SUMMARY OF AMA PUBLIC RELATION CONFERENCE, CHICAGO

THE MEDICAL ASSOCIATION of Georgia was well-represented at the A.M.A.'s Public Relations Conference held in Chicago the latter part of August. The Chairman of our Public Relations Committee, along with Mr. Krueger, were in attendance, and Dr. Chris McLoughlin was on the program.

Several new thoughts along public relations lines were explored, such as a discussion of the position that medicine must take in the changing world of today. Various clinics were held demonstrating the techniques for reaching the members of the Medical Society, as well as the general public. The A.M.A. is already beginning to fight the food fad which is sweeping the country and which is costing patients staggering amounts of money for special foods that do no more good than a well-balanced diet, as we know it.

The most interesting bit of news from the Conference was that the A.M.A. is now publishing the *A.M.A. News* which you will receive twice monthly. We saw the first copy and believe that it will receive a fine reception.

John P. Heard, M.D.

ANNOUNCEMENTS

Interstate Postgraduate Medical Association 43rd Annual Scientific Assembly, Cleveland, Ohio, November 10-13. Auditorium and Statler-Hilton Hotel. \$10.00

the association

registration fee covers membership for one year. Write Erwin R. Schmidt, M.D., Box 1109, Madison 1, Wisconsin.

Courses in Electrocardiography, weekly lectures sponsored by Georgia Heart Association, Emory University School of Medicine, Heart Disease Control Program, and Georgia Department of Public Health. Grady Memorial Hospital, Atlanta. Wednesday nights, 6:00 P.M. Remaining lectures every Wednesday night through November 19.

International College of Surgeons, Mid-Atlantic Regional meeting, The Homestead, Hot Springs, Va., November 16-18. The scientific program will consist of ten papers, two panels, and a sound movie in color. These will cover a wide range of subjects, with speakers from all parts of the country. Banquet the evening of the first day. Write Dr. Elbyrne G. Gill, 711 Jefferson Street South, Roanoke 13, Va.

Southeastern States Cancer Seminar, Hillsboro Hotel, Tampa, Florida, November 19-21, 1958. Outstanding program with a panel of nationally prominent guest speakers. All physicians invited to attend and credit is given by the American Academy of General Practice for postgraduate training. No registration fee.

Surgery of the Cornea, offered by New York University. Five day course December 1-5, 1958, designed to offer thorough coverage of current concepts and practices in the field of corneal surgery. Afternoons devoted to didactic lectures, illustrated by lantern slides and motion pictures. During mornings, as patient material is available, opportunity is offered to observe surgical procedures in operating room. On last morning of course, students perform surgical procedures on animal eyes. Under direction of Dr. Ramon Castroviejo. Tuition \$225.00. Write: Office of the Associate Dean, New York University Post-Graduate Medical School, 550 First Ave., New York 16, N.Y.

DEATHS

CLEVELAND THOMPSON, SR. of Waynesboro, died August 5, at the age of 74.

A native of Vidalia, Dr. Thompson was educated at Hearn Academy, Cave Springs, and taught school in Toombs County for a year before entering the Medical College of Georgia, from which he was graduated in 1909. He spent two years training in surgery at Polyclinic Hospital in New York, and later studied at the Mayo Clinic in Rochester, Minn.

Dr. Thompson entered practice with Dr. Lloyd Belt in Millen in 1913 and operated the Millen Hospital from 1921 to 1950. At that time he sold it to the Primitive Baptist Church for conversion into Bethany Home

for the Aged, and it is now being used for that purpose.

Dr. Thompson was a member of the American College of Surgeons, a member of Alpha Omega Alpha, honorary medical fraternity, and had the distinction of serving for two years as president of the Medical Society of Georgia. For more than 25 years he served as surgeon for the Central of Georgia Railroad.

An ardent fisherman and hunter, Dr. Thompson was a member of the Savannah River Boating Club. He was a charter member of the Rotary Club of Millen and was a member at one time of the Rotary Club of Waynesboro. Dr. Thompson was also a member of the First Baptist Church of Waynesboro.

He is survived by one son, Dr. Cleveland Thompson, Jr.; one grandson, Cleveland Thompson III, now pursuing his pre-medical studies at the University of Georgia; one granddaughter, Lenora Ann Thompson; and a sister, Mrs. H. D. Thompson.

SOCIETIES

At a recent meeting of the BIBB COUNTY MEDICAL SOCIETY, Exum Walker of Atlanta gave a discussion concerning the present trends of medical liability suits.

James C. Metts of Savannah was toastmaster at the FIRST DISTRICT MEDICAL SOCIETY meeting held at the Forest Heights Country Club in Statesboro, and Albert Deal of Savannah was general chairman. The afternoon session consisted of committee meetings and golf, and the night program included a banquet and short business session.

George Smith and B. V. Elmore were honored recently by the FLOYD COUNTY MEDICAL SOCIETY for their completion of 50 years in medical practice in Rome. A committee headed by A. F. Rutledge, C. J. Wyatt, Ed Bosworth, and Ralph Johnson planned the recognition.

Sam Garner, president of the Floyd County Medical Society, presided and approximately 40 doctors attended the meeting.

Those taking part on the program of a recent FULTON COUNTY MEDICAL SOCIETY meeting were T. Sterling Claiborne, Bernard S. Lipman, William A. Hopkins, William E. Van Lleit, and James B. Minor.

The SPALDING COUNTY MEDICAL SOCIETY sponsored a polio shot clinic in September. Members of the Spalding County Medical Society, nurses, and office assistants from the doctors' offices gave their services to this "Dollar Clinic."

The semi-annual meeting of the TENTH DISTRICT MEDICAL SOCIETY was held in Thomson, August 21. The meeting was attended by approximately 35 members and their wives. A golf tournament was held in the morning, followed by lunch and the scientific program. Drs. Kelly, Blitch, Waters, and Traylor presented papers.

After a brief business meeting a steak dinner was served, arranged by Drs. Garrison, Foster, and Maxwell.

New Officers were elected for the coming year. They were: Stewart Brown, president; Stephen W. Brown, vice-president; and S. K. Brown, secretary-treasurer.

PERSONALS

First District

As guest speaker at the annual meeting of the Northeastern Section of the American Urological Association which was held in Manchester, Vermont in September, CHARLES L. PRINCE, Savannah, presented the paper, "Renal Calculus Disease."

After having completed six months study as a research fellow in neurology and electroencephalography at Mount Sinai Hospital in New York City, BENJAMINE C. WILLS has resumed practice in Savannah.

Second District

No news submitted

Third District

No news submitted

Fourth District

No news submitted

Fifth District

GUY V. RICE, Atlanta, has been elected president of the Southern Branch of the American Public Health Association.

T. F. ABERCROMBIE, Decatur, has received a Faithful Service Award given by the State of Georgia in recognition of 41 years of creditable service to the state.

The Forest Park Clinic has announced the association of WILLIAM L. CATON, Atlanta, to its group of physicians.

CARL C. AVEN, Marietta, has left for the Far East where he will report on tuberculosis in the United States at a series of medical meetings.

J. H. KITE of Atlanta spoke at the annual meeting of the Bartow County Masonic Convention which was held in Cartersville.

Sixth District

Among the doctors receiving the Faithful Service Award, given by the State of Georgia for creditable service to the state, was YOUNG HARRIS YARBROUGH of Milledgeville. Dr. Yarbrough has served Georgia for over 51 years.

DR. AND MRS. Z. S. SIKES formerly of Dublin, have moved to Macon where Dr. Sikes will enter private practice.

Seventh District

WALTER H. KETCHUM, Rome, addressed members of the Rome Exchange Club at a recent meeting. Tuberculosis was the subject of Dr. Ketchum's address.

WILLIAM THOMPSON, Calhoun, is taking specialized training in surgery at Greenville General Hospital in South Carolina. He plans to return to Calhoun in July, 1959.

Eighth District

ROBERT PERRY, Brunswick, was guest speaker at a recent meeting of the St. Simons Island Rotary Club. Dr. Perry is now associated with Brunswick Hospital.

Ninth District

ROBERT E. SHIFLET, Toccoa, has been elected County Commissioner of Stephens County.

Tenth District

THOMAS W. GOODWIN of Augusta was installed as president of the Georgia Chapter, American College of Surgeons at the annual meeting in September which was held at Sea Island.

Director of the Talmadge Hospital RUFUS F. PAYNE, Augusta, was guest speaker at a recent meeting of the Harlem Rotary Club.

W. STEWART FLANAGIN and his family have returned to Augusta after spending a few days in Chattanooga, Tennessee. While there, Dr. Flanagin made a speech entitled "Restoration of Facial Balance" to members of the Chattanooga Academy of Surgeons.



GP WEEK — Governor Marvin Griffin signs a proclamation declaring the Week of October 12-18 "Georgia General Practitioner's Week." Pictured with the Governor above are Fred H. Simonton, Chickamauga, left, President of the Georgia Academy of General Practice and W. Mercer Moncrief, Atlanta, right, GAGP Secretary-Treasurer.

SUGGESTED GUIDE FOR PHYSICIANS SIGNING CERTIFICATES OF SAFETY FOR DELIVERY BY CERTIFIED MIDWIVES

AS ONE STEP toward reduction of excessive maternal and infant death rates, the Maternal and Infant Welfare Committee of the Medical Association of Georgia feels that the following sections of the *Midwives Licensing Act of 1955* highlight the moral obligation of the physician for the welfare of the mothers and infants concerned in the nearly 3,000 midwife deliveries still occurring in the state.

Section 8 of the Act provides that certificate issued under the Act, "shall not confer upon any person the right to practice medicine, to prescribe or administer drugs, to undertake charge of abnormal cases of confinement, or of any disease in connection with confinement, or to assume any name, title, or designation implying that such person is authorized by law to undertake charge of any such cases, or to practice medicine, or to administer drugs."

Section 9 of the Act provides that, "it shall be unlawful for any person holding a certificate as a midwife to attend any except cases of normal childbirth, as defined herein, or to perform any internal examinations or manipulations of any kind. In all cases in which the child is not delivered spontaneously within a reasonable time, the midwife shall notify a qualified physician or other person licensed to practice obstetrics immediately, and shall make no effort to deliver the child except under direction and supervision of such practitioner."

The Regulations promulgated by the State Board of Health under this Act require that "if a midwife is to accept a case for delivery, the patient must have obtained certification by a licensed physician as safe for a midwife delivery as of the date of his examination." This may be issued after the seventh month of pregnancy and must be in writing. "It constitutes only a statement of opinion of probability of normal childbirth as determined by his examination, not of subsequent medical responsibility."

The committee wishes to call your attention to the following prenatal, intra-partal, and postpartal conditions, specifically selected as extremely difficult to manage under any circumstances.

Prenatal

The committee suggests that the following conditions contraindicate signing of a certificate for safety

for delivery by a midwife, and urges that the physician lend all efforts toward hospitalization with delivery by physician.

1. Ante-partal bleeding
2. Pre-eclampsia and eclampsia
3. Chronic hypertensive cardiovascular and renal disease
4. Multiple pregnancy
5. Abnormal presentations and positions
6. Contracted pelvis, and pelvic deformities
7. Severe anemia—below 8 grams
8. Diabetes and tuberculosis
9. History of previous cesarean section
10. History of previous obstetrical complication and/or perinatal disaster.

Under no conditions should a midwife have to undertake delivery of any patient with one or more of the above conditions.

Intra and Postpartal

In addition to the above conditions which would militate against a certificate of safety, the committee feels that the physician is morally obligated to attend any patient referred by a midwife in the event of the development of complications in the process of labor and in the neonatal period, for example:

1. Labor prolonged past 18 hours
2. Retained placenta
3. Postpartal hemorrhage
4. Signs of infection of mother and/or infant.

Health Department Responsibility

The committee would like to call your attention to the fact that the public health department in your county is directly responsible for the supervision of midwives, and often concerned with the care of women attended by midwives. However, it should be recognized that the health department cannot be responsible for care of abnormal cases. All suspected abnormalities should be referred to a private physician.

The committee also suggests that you will find health department personnel can often be helpful on request with home follow-up of patients who have abnormalities. Acting under your directions, they can be helpful with instructions and supervision at home after your diagnosis and treatment plan has been set-up.

CURRENT CLINICAL CONCEPTS

KELOIDS

Dr. Edward W. Kelly and Dr. Herman Pinkus of Detroit report on four years experience with Tetrahydroxyquinone (THQ) as an oral treatment for keloids. They suggest that keloids of all ages show some response to this drug in thirty milligram doses, three times a day, and that while the response is slow, the result is very definite; and that more regression is obtained in the younger keloids. The drug may be obtained through the Paul B. Elder Company in Bryan, Ohio.

A. M. A. Archives of Dermatology (September) 1958.

URINARY RETENTION

The incidence of urinary retention following abdominoperineal resection is sufficiently high to justify simple perineal prostatectomy at the time of the abdominoperineal resection. The authors have also found in their series of 62 cases carefully investigated that local invasion of the prostate and seminal vesicles by rectal carcinoma occurs frequently enough that they recommend radical or total prostatectomy, and seminal vesiculectomy for rectal lesions near the prostate. The procedure eliminates the usual post-operative urinary difficulty, eliminates urinary tract infection, and removes the area of possible direct carcinomatous involvement or extension.

S. G. & O., 107:333, 1958.

CONTACT DERMATITIS

It has recently been reported by Dr. Sam Ayres, Jr. and Dr. Sam Ayres III of Los Angeles, California that the common household plant, the Philodendron, which is particularly popular in the warmer areas of the United States is capable of producing contact dermatitis, the eruption of which is clinically similar to that of poison ivy dermatitis with its striking linear, vesicular pattern of eruption.

Personal Communication: Herbert S. Alden, M.D.

MANAGEMENT OF SHOCK

Causes of Shock: 1) hypovolemia
2) cardiac failure
3) bacteremia
4) hypersensitivity
5) neurogenic factors
6) obstruction to blood flow

Eliciting cause is essential for adequate treatment in Shock. Vasopressor drugs are usually helpful in cardiac failure, bacteremia and hypersensitivity states. In hypovolemia and in shock due to obstruction of blood flow the pressor agents are contraindicated until replacement of blood and/or fluids is adequate.

Metaraminol (ARAMINE®) may prove to be the pressor amine of choice: simple to administer, avoids risk of injury to skin and subcutaneous tissues and is available for injection without additional fluids. The latter advantage makes it the most feasible drug in shock where renal failure is present.

In the presence of acidosis some value may be attached to the use of a molar solution of sodium lactate. Other drugs have their place in treatment of shock—if indicated—adrenocortical hormones, digitalis glycosides, and atropine (the last, especially, where bradycardia exists).

Circulation 16:1097-1105, 1957.

ILEAL RESERVOIR

No entirely satisfactory substitute had been found prior to the introduction of the use of an ileal loop as a conduit for urine by ureteroileostomy. Carrying the idea of substituting the ileum for the bladder one step farther, a successful result is reported in the anastomosis of the ureters to a double loop of ileum which is in turn anastomosed to the urethra after total cystectomy. Disturbances in the electrolyte balance fails to occur. The patient retains urinary continence. This is indeed a milestone in radical surgery of the bladder.

J. A. M. A., 167:2183, 1958.

CLINICAL CONCEPTS / Concluded

VASCULAR PROSTHESIS

The knitted flexible Dacron tube is the most satisfactory synthetic vascular replacement, so say Crawford, DeBakey, and Cooley. When Dacron knit tubes were used to replace segments of the abdominal aorta or peripheral arteries, circulation was restored in 98 per cent of 210 patients.

In order of preference the orlon, Edwards-Tapp (crimped nylon), orlon taffeta, and Ivalon were next.

Arch. Surg. 76:261-270, 1958.

PREVENTION OF RENAL CALCULI

Aspirin or preferably salicylamide, two tablets three times a day, along with a diet omitting milk has prevented formation of new calcific renal calculi over a follow-up period of three years in patients who had previously had numerous calculi.

Personal Communication: Arthur J. Merrill, M.D.

PEYRONIE'S DISEASE

Peyronie's disease (fibrosis of the intercavernous septum of the penis) will respond to the injection of hydrocortone into the fibrotic plaques. The introduction of this steroid requires a syringe which will withstand pressures great enough to introduce the medication into the dense fibrotic tissue. The use of a veterinary syringe, Luer-Lok in type whose glass sides are supported by metal and whose handle will accept the index and middle fingers. This permits the injection of two or more cc's of the solution under pressures great enough to penetrate the plaques. The results of such injections with the veterinary syringe are encouraging.

Personal Communication: Peter L. Scardino, M.D.

ADDITIVES TO TETRACYCLINES

The addition of additives to tetracycline hydrochloride is said to enhance the antibacterial effect of the tetracycline base. The addition of citric acid did result in a significant statistical enhancement of the drug in laboratory experiments performed by the authors, but no real evidence of enhancement was demonstrated in clinical studies using repeated doses over long periods of time. In the usual circumstances

encountered in the treatment of patients, no useful clinical purpose is served by adding various preparations to the tetracycline base.

New England Journal of Medicine, 259:147, 1958.

TRANSFUSION IN GASTROINTESTINAL HEMORRHAGE

Routinely utilize gastric tube (in absence of evidence of varices). X-ray examination is performed as soon as possible after blood pressure is stabilized. Consider a "hemorrhage sheet" placed at front of chart, a most important guide. Data to include (1) pulse rate, (2) systolic blood pressure, (3) pints of blood given and time when given, (4) hemoglobin response. In upper gastrointestinal bleeding (excluding those due to varices and blood dyscrasias) transfusion therapy was considered a failure and operation was indicated when there was:

- (1) a need for more than 5 pints (2500 c.c.) of blood in any single 24 hour period and
- (2) absence of definite response after 48 hours of treatment,
- (3) re-bleeding under therapy.

Arch. of Surgery 77:386-395 (September) 1958.

SELF-HEALING CANCER OF THE SKIN

Attention should be called to the number of medical articles recently published on the self-healing-epithelioma of the skin. The tumor has all the clinical appearance of the very rapidly growing epithelioma, and may even have the rolled border with the central necrotic ulcer. The history is quite important in that it grows to quite a large size within the space of four to six weeks. Clinicians and pathologists should be on the alert to diagnose and to understand the keratoacanthoma, since simple removal is a curative measure.

Personal Communication: Herbert S. Alden, M.D.

TEST FOR LUPAS

The para-toluene-sulfonic acid test for lupus is proving to be a valuable adjunct in the diagnosis of lupus. False positives are rare, though proven cases may fail to show a positive test. Subjects on adequate steroid therapy may convert positive to negative.

J. A. M. A., 166:1424, 1958.



SCIENCE WRITER WINS AWARD

Atlanta Journal science writer Edwina Davis receives a bronze medallion from Joseph S. Cruise, president of the Atlanta Tuberculosis Assn., for meritorious work on behalf of the Association. The award was given in recognition of the series of 12 articles on TB published in the *Atlanta Journal*. It was the first time the association award was given a member of the press. Miss Davis, who has covered MAG conventions for a number of years, received a similar award from the Georgia Tuberculosis Association at its meeting in Savannah in September.

STATEMENT OF PRINCIPLES CONCERNING PARAMEDICAL WORKERS IN RELATION TO MEDICINE

I

Medicine must re-establish its primacy, its overall responsibility and authority, in the realm of medical care.

II

Medicine should undertake to define the conditions under which any paramedical groups may or should be licensed. (Does the public interest require their licensure, or would licensure only lead to independent functioning which is not in the public interest?)

III

In the interest of a better coordinated professional service, medicine should determine and define the need for each paramedical group, its functions, its educational standards, and the manner in which its members (whether licensed or unlicensed) are to be recognized and supervised.

IV

Medicine should assert the principle that every physician has the legal right to do anything for the patient that his medical care requires, and that he

further has the right to delegate to any paramedical worker any technical procedure.

V

Medicine should further assert the principle that whatever privileges may at any time be granted to limited practitioners or paramedical workers, whether by law or otherwise, such grant in no way circumscribes the physician's authority in that field and in no way restricts the practice of medicine by the physician.

VI

The medical profession as a whole should recognize the basic fact that whenever any paramedical group succeeds in establishing independent status in any area of professional medical practice, or in circumscribing or compromising the authority of the physician in any area of professional medical practice, the threat or the damage extends to all of medicine and should be of concern to the entire medical profession.

Adopted as an official statement of the National Medical Foundation for Eye Care by its Board of Trustees, May 27, 1958.

THE MONTH IN WASHINGTON

WHEN THE CONGRESS that is elected in November goes to work next January 7 it will have before it a half dozen important health-medical issues that the last Congress took some interest in but didn't resolve. They include hospitalization under social security, tax-deferment on annuities, loans and mortgage guarantees for hospitals and nursing homes, aid to medical schools, and amendment of Veterans Administration's hospitalization procedures.

The issue of hospitalization under social security—the Forand bill principle—will come into the spotlight shortly after the new session starts. Under instructions from the House Ways and Means Committee, the Department of Health, Education, and Welfare will complete a study on the problems of financing hospital care for the aged before next February 1. Some study of medical costs may also be included.

Decision to move ahead with a study of medical care costs for the aged was reached by the committee at the same time it excluded the Forand idea from the social security bill enacted during the summer. HEW was told to pay particular attention to the possibility of increasing OASI taxes, and with the money purchasing health insurance (nonprofit or commercial) to take effect upon retirement or disability. This would differ from the Forand plan in that health care would be financed through insurance, and not paid for directly by the Federal government.

The Keogh bill to allow doctors and other self-employed to defer income taxes on money put into retirement funds passed the House with very little opposition, but encountered difficulty in the Senate. It was defeated there in the closing days, and under unusual circumstances. Policy committees of both parties decided to oppose the bill as too costly, and the vote came in the course of a complicated legislative maneuver that could not be used as a test of whether individual senators favored or opposed the bill itself.

Keogh bill sponsors, however, are encouraged that 32 senators resisted official party instructions and stayed with the pension plan. They are confident that next year under more favorable legislative circumstances the measure will clear the Senate.

An effort was made late in the session to authorize grants to medical schools for building and equipping teaching as well as research facilities. The bill extending the research grants program also would have allowed use of the grants for "multipurpose" structures (teaching and research) if emphasis were on research. How-

ever, for fear this change would hold up the simple extension bill, it was dropped off before the bill reached the House floor. Sponsors of aid to medical education will be back next year and campaign on this issue alone.

Legislation for U.S. guarantee of nursing home mortgages, strongly supported by the American Medical Association, fell by the wayside in the House during the closing hours of the session, after having cleared the Senate with no trouble whatever. This also will be pushed next year, and may have a better chance of passage because of the growing emphasis on need for solving the problems of the aged.

Far too late for passage, Chairman Olin Teague's House Veterans Affairs Committee reported out a bill that would make a number of changes in VA hospitalization procedures, liberalizing some and tightening up on others. The bill also would require VA to open 5,000 beds over which Mr. Teague and VA Administrator Whittier have been squabbling for months, the latter maintaining that the beds aren't needed. That issue still is unresolved, inasmuch as the bill didn't pass.

Congress did roll out a sizeable list of medical-health laws. It ordered the calling of a 1961 White House Conference on Aging; gave Food and Drug Administration authority to enforce its pre-testing standards on foods to which chemicals and other substances have been added; authorized loans as well as grants under the Hill-Burton program; authorized grants for the country's schools of public health and for civil defense purposes; raised military and VA physicians' pay; and required labor and management health and welfare plans to make reports and open up their books for inspection by members.

American Medical Association was able to persuade the Department of Defense and the administration to retain the post of Assistant Secretary (health and medical) in the reorganization of the department. In legislation passed by Congress to bring about the reorganization, one of the assistant secretary posts would have been eliminated, and the medical assistant was marked for down-grading. However, Secretary McElroy eventually announced that the position would be continued.

Even before Congress adjourned, it was clear that trouble was in sight for Medicare because of inadequate appropriations and instructions from Congress not to exceed the appropriation. To keep within the limitation, if possible, Defense Department was channelling many thousands of service families to military facilities, and at the same time limiting the scope of care permitted in civilian facilities.

Complete Report on Last Session's Legislation Now Available

The Washington Office of the American Medical Association has prepared a 32-page SPECIAL REPORT giving the essential information on all medical legislation introduced in the last (85th) Congress. The report contains a listing of the 19 major bills enacted, the bill numbers, and the public law numbers. It has a page index of all the 704 bills followed by the Office, an index by subjects, a description of each bill and what action, if any, was taken on it by Congress.

Because the last QUARTERLY LEGISLATIVE REVIEW was published after the adjournment of Congress, and contained final information on all major bills, the detailed report is not being sent to the mailing list for the AMA WASHINGTON LETTER. However, a copy will be mailed to anyone requesting it. Write to the AMA Washington Office, ask for SPECIAL REPORT 85-14.

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Composite view of the new doctor's office building at Rochelle, Ga., built by citizens of the community to attract a physician to their town. See Page 564.— Art work by John Stuart McKenzie.

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*Surgical experience accumulated in the
treatment of nine hundred patients
over a ten year period is reviewed.*

SURGICAL CONSIDERATIONS IN THE TREATMENT OF PEPTIC ULCER

James E. Thompson, M.D., *New York, New York*

THE SURGICAL TREATMENT of peptic ulcer has gone through a clinical change during the past 75 years that, in a sense, reflects the evolutionary changes seen in many of the patterns of our daily living. The change, though not always radical and dramatic, has generally been purposeful and practical. In fact, some of the so-called new techniques may merely be the old ones, resurrected and barely altered by some slight innovation or addition, to suit the needs of the present.

In considering surgical techniques that in the past have been preferred modes of treating ulceration, the Billroth I and II procedures represent the basic pattern to which modifications have been added by such men as Polya, Hoffmeister, and Von Eiselsberg. At the turn of the century, gastrectomy gradually fell into disfavor with many surgeons. The morbidity, the high mortality, and frequency of gastrojejunal ulceration were factors that influenced the need to discover and utilize a less formidable procedure. This need pertained particularly to the use of gastrectomy as a method of treating duodenal ulcer.

As a result of this situation, in this country duodenal ulcer became an illness which, except for the complication of perforation, was almost entirely cared for by the internist. However, in the early 1920's posterior gastroenterostomy very rapidly came into vogue as a treatment for duodenal ulcer. The appeal of this procedure to the surgeon undoubtedly lay in its ease of accomplishment, as com-

pared to the difficulty and hazards of gastrectomy. Nevertheless, as time went on, experience proved that gastroenterostomy often had the unhappy sequel of gastrojejunal ulceration. In a small proportion of cases, these new ulcerations developed within the first few years, though they generally took as long as 10 to 15 years to evidence themselves. The disability that resulted from this complication was usually more severe than the original duodenal ulcer. These new, marginal ulcers were prone to bleed, sometimes massively; they could perforate, or even worse, they could penetrate into the transverse colon to produce a gastrocolic fistula. These distressing late results and the inadequacy of gastroenterostomy to accomplish the healing of the duodenal ulcer itself, in all cases, caused many surgeons to abandon this short-circuiting procedure.

About 20 years ago, interest in gastrectomy was revived, mainly as an aftermath of the discouraging late results of gastroenterostomy for duodenal ulcer. The improvements in the methods of anesthesia, as well as in preoperative and postoperative care, have made the larger procedure much less formidable and more acceptable. In the past 20 years, vagotomy has been the only challenge to gastrectomy as the favored operation for duodenal ulcer.

After vagotomy came into use, it was eventually discovered that simple division of the vagus nerves had many unpleasant side effects, and that these could be overcome by combining vagotomy at the primary procedure with a posterior-gastroenterostomy. At first, results of this *combined* procedure were most encouraging; but in time, history repeated

itself—the late results of vagotomy with gastroenterostomy proved to be little better than gastroenterostomy alone. At present, vagotomy is also being used by many surgeons as an adjunct to the various types of gastrectomy. It is added to the primary procedure, and is also performed as a secondary one, in the treatment of marginal ulceration where the original gastrectomy, though adequate, has proved unsuccessful.

There have been many encouraging reports of good early results from vagotomy combined with a 2/3 or 3/4 gastrectomy, or a hemi-gastrectomy. The confirmed efficacy of this combination will not be known, however, until large groups of cases have been followed for at least ten years.

This brief description of the evolution of surgical procedures employed in the treatment of peptic ulcer is given to serve as a background for the discussion that follows.

It is the intent of this paper to present a rationale for the treatment of peptic ulcer, without being dogmatic about any of the procedures now in use. The discussion will encompass the elective treatment of gastric and duodenal ulcer and the complications of massive hemorrhage and perforation, as employed in our hospital.

Gastric Ulcer

Elective resection for gastric ulceration is indicated on the basis of two factors—intractable symptoms and the possible presence of malignancy. A stomach ulcer that heals under medical management, with coincidental disappearance of symptoms, does not merit surgical intervention so long as recurrence does not develop. On the other hand, a gastric ulcer that recurs in a patient who has been reasonably attentive to his medical regimen does indicate the need for surgery. There are two facets to this indication, namely, the fear of early malignant changes in the ulcer and the knowledge that the patient can be rehabilitated by gastrectomy.

It is unfortunate that early malignant change in the stomach is usually not easily distinguished from benign ulceration by X-ray examination. It is therefore wise to adopt the attitude that *any* gastric ulceration, which fails to show evidence of healing after two weeks of complete bed rest and diet, requires exploration and gastrectomy. Ulcers in the gastric antrum, as well as those situated on the greater curvature, are viewed from the onset with extreme suspicion. The large ones, 2 cm. or more in size, are considered to be prime candidates for surgery; for though not necessarily malignant, they are less likely to heal under medical therapy.

The results of gastrectomy for gastric ulcer are almost uniformly good, particularly when the ulcer is located in the main body of the stomach. The operative mortality is low, and gastrojejunal ulceration is a rare sequel. It is for this reason that in the average case, once the decision to operate has been made, the surgeon can proceed with equanimity.

There are, however, certain conditions under which gastrectomy does present problems that require careful consideration, since there are certain types of ulceration that present difficulties in removal. One such type is the large antral ulceration in the immediate “pre-pyloric” area that penetrates into the pancreas. This lesion can present all the technical problems of a “difficult” duodenal ulcer and, frequently, many of its complications. Another lesion difficult to remove is the ulcer of the lesser curvature when it presents certain gross characteristics suggestive of malignancy. This type of lesion requires a radical gastrectomy because of the uncertainty as to its exact nature. When such an ulcer turns out to be benign and is juxtaesophageal, the surgeon's dilemma is magnified; and, on occasion, he may make the mistake of performing a total gastrectomy.

Under ordinary circumstances in treating gastric ulcer, a 2/3 gastrectomy of either the Billroth I or II type, depending on the surgeon's preference,



ABOUT THE AUTHOR

JAMES EDWIN THOMPSON, New York, N.Y., was born in Galveston, Texas. He attended the University of Texas where he received both his B.A. and medical degrees. Dr. Thompson is a fellow of the American Surgical Association, the New York Medical-Surgical Society, the Southern Surgical Association, and the New York Surgical Association. He is at present chief of the Surgical Service of the Roosevelt Hospital and Associate Professor of Clinical Surgery, College of Physicians and Surgeons, Columbia University.

should give good results. Vagotomy added to the procedure would seem to have no advantage. In treating peptic ulcer at our hospital, we have preferred to use the ante-colic gastrectomy of the Polya type with the Hoffmeister modification. In this method, the proximal loop is made reasonably short and is applied to the lesser curvature side of the anastomosis. In the 11 year period from 1946 through 1956 we performed 151 elective gastrectomies for gastric ulcer, and had four operative deaths, a mortality of 2.6 per cent (Table 1).

TABLE I
Deaths Associated With Partial Gastrectomy
The Roosevelt Hospital, 1946-1956

Procedure	No. of Patients	Deaths	% Mortality
Gastric Ulcer	151	4	2.6%
Duodenal Ulcer	573	26	4.5
Massive Hemorrhage*	176	17	9.6
TOTAL	900	47	5.2%

*68% were acute emergency procedures.

Duodenal Ulcer

The operative treatment of duodenal ulcer continues to be a controversial topic. In spite of the divergences of opinion as to the best technical method of treatment, there is little dispute over the indications for surgical intervention.

It is generally conceded that the patients most likely to benefit from an elective operation for duodenal ulcer are those who have been intractable to thorough medical therapy, or who, finding it impossible to adhere to a strict medical regime for a variety of reasons, continue to have disabling symptoms. The patients more urgently in need of surgical treatment include those who have symptoms following an episode of perforation or severe hemorrhage.

The age of the patient should not greatly affect the indications for surgery, but should, on occasion, modify the type of procedure employed. The operative mortality from gastric resection is much greater in the aged, and for this reason, a procedure of less magnitude should be strongly considered for the poor-risk elderly patient. By contrast, the young adult with a particularly resistant duodenal ulcer and virulent symptoms is, under conservative management, destined for complications and disability.

Our procedure of choice for duodenal ulcer is partial gastrectomy, with the reservation that the old and debilitated patients who cannot safely tolerate a gastrectomy should be submitted to a gastroenterostomy with or without a vagotomy, or a pyloroplasty with a vagotomy.

The ultimate success of gastrectomy depends on a permanent reduction in gastric hypersecretion. To

accomplish this end, all of the gastric antrum and a sufficient amount of stomach must be removed. There are many surgeons who feel that success with procedure is enhanced by combining it with vagotomy. Others are convinced that the addition of vagotomy makes it necessary to perform only a hemi-gastrectomy, rather than a 2/3 or 3/4 gastrectomy.

The common objective, in any event, is to have the patient well nourished and happy about the operation, and to minimize the risk of marginal ulceration at a later date. This postoperative complication, though an unusual outcome of surgery for gastric ulcer, is a constant threat in the sufferers of duodenal ulceration, regardless of the operative procedure employed. It is for this reason that we have always placed great emphasis on the importance of removing the duodenal ulcer that is close to the pylorus, since it is believed that otherwise, complete removal of the gastric antrum cannot always be assured. If, however, damage to the common duct cannot otherwise be avoided, the ulcer is left in situ, and the Bancroft procedure is performed. This entails dividing the antrum 3 or 4 cm. proximal to the pylorus, removing all the mucous membrane, and obtaining a closure by approximating the underlying muscularis. When the stomach can be divided beyond the pylorus, and there is sufficient healthy duodenum proximal to the ulcer to obtain a good closure, there is no need to remove the ulcer. It is a general belief that ulcers excluded in the stump will eventually heal in time, and in our experience, this is true.

An aggressive approach toward removing the duodenal ulcer has the disadvantage of increasing the number of serious complications. It must be expected that a higher incidence of duodenal and pancreatic fistulas, biliary leaks, and acute hemorrhagic pancreatitis will result from extensive dissection in the pancreatico-duodenal area (Table 2). However,

TABLE II
Partial Gastrectomy for Gastric Ulcer
Fatalities Related to Area of Involvement in 151 Patients

Area of Involvement	Deaths
Pancreaticoduodenal	0
Cardiopulmonary	1
Miscellaneous	3
	4 (2.6%)

in order to accomplish an adequate gastrectomy and insure good late results, these are the risks that must be accepted.

Our experience with 573 elective gastrectomies for duodenal ulcer and a resulting 4.5 per cent mor-

tality (Table 1) indicates that, under certain circumstances, this operation is a formidable one.

Massive Hemorrhage

The most common cause of massive hemorrhage from the upper gastrointestinal tract is peptic ulceration, occasionally appearing in the guise of gastrojejunal ulceration, or multiple gastric erosion. Other causes, in the order of frequency with which they occur, are esophageal varices, benign leiomyomata, and malignant neoplasms of the stomach. In our experience, the incidence of massive bleeding from duodenal ulcer has been three times more common than from gastric ulcer.

On a few occasions, unfortunately, we have been unable to discover any source of hemorrhage at operation.

There are three general courses to follow in treating massive hemorrhage: Non-operative medical therapy for all cases; emergency gastrectomy for all cases; or a more conservative, though expectant approach, which entails gastrectomy for those patients who do not cease bleeding within a reasonable length of time. We have preferred the third course, and would like to offer the following as valid criteria for operative intervention:

1. Continued massive bleeding in spite of conservative measures. (The decision to operate under these circumstances may be made at any time within the first 12 to 24 hours of admission.)
2. Recurrent massive hemorrhage after a quiescent interval of hours or days.
3. Continuous oozing from an ulcer that makes it difficult to maintain normal blood levels by transfusion.

In all cases, the preoperative management is important, and wherever possible, every effort is made to ascertain the patient's past history with regard to ulcer. Patients who cease bleeding are given X-ray tests, in order to rule out esophageal varices, or to help in establishing the diagnosis of peptic ulceration. These tests have been of substantial help in cases of recurrent bleeding. Where varices are suspected, insertion of a Sengstaken tube will usually help in making a definitive diagnosis.

In all instances, a Levine tube is placed in the stomach and kept on suction until the danger of recurrent bleeding has passed. This step keeps the observer constantly aware of the nature of the bleeding, and of its presence. In addition, it has seemed to be of therapeutic aid in keeping the stomach empty of blood and gastric secretions. An attempt is made to constantly keep abreast of blood loss by transfusions, regardless of the amount required; and

any difficulty encountered in accomplishing this end is a prime indication for emergency gastrectomy.

A blood-urea-nitrogen determination must always be obtained immediately after admission; and although moderate elevations are frequently seen, only in 10 per cent of our patients were the levels above 50 mg. per 100 cc. Patients with levels above 50 mg. per 100 cc. should be considered as having a poor prognosis, and are likely to be suffering from an associated nephrosclerosis. In these cases, it is wise to consider that there would be more chance of survival under conservative medical therapy.

When the decision to operate has been made, it should be carried out with dispatch; and adequate blood should be available for replacement until the bleeding is controlled. It is important, on opening the abdomen, to make a thorough exploration of the stomach, duodenum, and upper jejunum. If the source of bleeding is evident on inspection or palpation, the gastrectomy is performed without further ado. Unfortunately, in many such instances, the preliminary exploration reveals no obvious source of bleeding, and in that case, a gastrotomy incision is used.

The gastrotomy, if necessary, can extend from the junction of stomach and esophagus, to a point in the duodenum some distance beyond the pylorus. The source of bleeding is usually exposed with the aid of this wide exposure.

The bleeding ulcer is generally removed with the resected portion of the stomach. Occasionally, a duodenal ulcer is encountered that cannot be removed with safety. Under such circumstances, transfixion sutures are placed above and below the ulcer, so as to control blood flow through the gastroduodenal artery and check the bleeding. Gastric ulcers, found in the gastric remnant after resection, are transfixed in order to control bleeding; and in addition, the left gastric artery is ligated near its origin.

At Roosevelt, we have performed 176 partial gastrectomies in patients suffering from massive hemorrhage. 68 per cent were emergency procedures, and the remainder were performed later in the same hospital admission, because of continued oozing after the initial massive bleeding had ceased. There were 17 deaths, an operative mortality of 9.6 per cent.

Perforation of Peptic Ulcer

Perforated ulcer has been treated for many years by simple closure or free omental grafts, because previously, gastric resection for this complication had been shown to carry a prohibitive mortality. In recent years, there has been a revived interest in employing gastrectomy for selected cases; and there is every evidence that in competent hands, the mortality can be kept at a minimum, if careful selec-

tivity is used. The great majority of perforated ulcers are located in the duodenum; and those on the anterior wall do not present the same technical difficulties of removal as the average unperforated chronic ones situated posteriorly.

In our hospital, we have continued to treat perforated peptic ulcers by simple closure or free omental grafts, in spite of the temptation to be more radical. As reviewed by Kingsbury and Pennoyer (Report to be published at a later date), we found that our over-all operative mortality dropped from 17 per cent in 1940 to 5.2 per cent in a recent five-year period. A 63.8 per cent follow-up was obtained on 453 survivors of perforation, and it was found that 35.5 per cent remained free of symptoms. The knowledge that such a high percentage of patients *can* be free from symptoms following perforation is sufficient reason to oppose committing them to a needless gastrectomy; on the other hand, it is only fair to point out that 38.6 per cent of our followed patients underwent gastrectomy at a later date.

Some surgeons have elected to treat perforation by a different method, that is, continuous gastric suction. In our opinion, this is a dangerous therapeutic measure and can have disastrous results. It should be used only for the moribund patients unable to tolerate operation, or for those who refuse surgery.

Evaluation of Results

At the Roosevelt Hospital, partial gastrectomy has been the usual surgical treatment of patients with peptic ulcer, except in cases of perforation. The evaluation of any operative method must take into consideration the sacrifices involved, in terms of complications and mortality, and then weigh them against the anticipated end results.

The complications that are expected to result from gastrectomy are strongly related to certain factors. The most important one is the extent of surgery done in the area of the proximal duodenum and the adjacent head of pancreas and common duct. This explains why most large hospitals and clinics report more complications and a higher mortality rate after gastrectomy for duodenal ulcer, than after the same operation for gastric ulcer.

The age of the patient is next in importance for a reason that should perhaps be obvious. The older patient is more likely to be suffering from an associated or totally unrelated constitutional deficiency or disease, which may have particularly affected the cardio-pulmonary or renal system.

A final factor is the extent and nature of recent or persistent hemorrhage from the ulcer. The myocardial ischemia, associated with prolonged drops in blood pressure from massive hemorrhage, can have

most disastrous temporary or permanent effects on an unhealthy myocardium. This results in a reduced cardiac output, which can seriously affect a kidney already diseased and functionally on the "border-line". The physiological mechanism involved explains the high incidence of uremia and coronary occlusion, as complications of gastrectomy for massive hemorrhage.

At this point, a brief review of the technique of gastrectomy as usually performed in this hospital is indicated, to serve as a background for the particular complications we are reporting. We employ, as a rule, an ante-colic 2/3 to 3/4 gastrectomy of the Polya type with the Hoffmeister modification, the proximal loop comparatively short and placed on the lesser curvature side. There are occasional variants to this procedure, but about 90 per cent of our gastrectomies are executed in this fashion.

In the treatment of duodenal ulcer, vagotomy has been added to the primary gastrectomy in a few instances. The Billroth I procedure has only rarely been employed. We always make every effort to remove the duodenal ulcer and do so, as long as damage to the common duct can be avoided. However, if the ulcer is at some distance beyond the pylorus, it will be left in situ, provided the portion of the duodenum proximal to it can be closed with safety. Where the ulcer has penetrated the head of the pancreas, we have preferred to exclude the base of the ulcer and then divide and close the duodenal stump distal to it. When the ulcer cannot be removed safely, and the duodenum proximal to it is not sufficient to obtain a good closure, we have on rare occasions employed the Bancroft procedure. This entails dividing the gastric antrum 3 to 4 cm. proximal to the pylorus, excising all the gastric mucous membrane, and approximating the underlying muscle layers to obtain a closure.

We have given consideration to the fatal complications in our patients, as related to the anatomical area of involvement. The large majority of these sequelae fall into two general categories—those related to the surgery performed in the pancreaticoduodenal area, and those due to unforeseen developments in the cardiovascular and pulmonary system. Those that do not fall into either category have been put into a third miscellaneous group.

Elective Gastrectomy for Gastric Ulcer

It is evident from Table 2 that the operative risk involved in this procedure is, in major part, the risk assumed in performing any operation in the upper region of the abdomen. The age of the patient and his general constitutional status, in relationship to his cardiac, pulmonary and renal systems, bear the greatest influence on the ultimate outcome of the

operation. In our patients, there have been no deaths due to the dissection involved in defining and closing the duodenal stump, and none of the cardiopulmonary or miscellaneous deaths were predictable.

Elective Gastrectomy for Duodenal Ulcer

As seen in Table 3, almost half of the deaths from this procedure occurred in patients with involvement in the pancreaticoduodenal area, and are directly related to the difficulty in removing the duodenal ulcer itself. Seven of our patients developed a duodenal fistula, which was the primary complication often compounded by one or more events, leading to death. These fatal events included, among other things, such calamities as subhepatic and subphrenic abscess, wound disruption, phlebitis, and septicemia. There were also three patients who developed acute hemorrhagic pancreatitis of a fulminating nature, which lead to death within a few days.

TABLE III

Partial Gastrectomy for Duodenal Ulcer
Fatalities Related to Area of Involvement in 573 Patients

Area of Involvement	Deaths
Pancreaticoduodenal	12
Cardiopulmonary	9
Miscellaneous	5
	26 (4.5%)

Cardiac arrest, coronary occlusion, pulmonary embolism, and pneumonia accounted for the deaths from cardiopulmonary causes. The miscellaneous deaths were unpredictable, and included evisceration, enterocolitis, acute yellow atrophy of the liver, and obstruction of the efferent jejunal loop.

If the deaths from pancreaticoduodenal causes could be eliminated from this group, the mortality would be essentially the same as that encountered in elective gastrectomy for gastric ulcer.

Gastrectomy for Massive Hemorrhage

The patients in this category were all submitted to the operation during the initial admission for massive hemorrhage (Table 4). In the majority of these patients, 68 per cent, the gastrectomy was an emergency procedure because of severe hemorrhage that continued, in spite of primary attempts at control with conservative treatment. The remainder of the patients underwent surgery as a delayed elective procedure, or because there was clinical evidence of continued oozing from the ulcer.

The one death attributable to a complication in the pancreaticoduodenal area was occasioned by failure to remove the duodenal ulcer. In spite of prim-

ary control of hemorrhage by transfixation, the patient developed a fatal episode of post-operative massive hemorrhage.

The deaths due to cardiopulmonary involvement were caused by coronary occlusion in four instances, cardiac arrest in three, and acute bacterial endocarditis with septicemia in one case.

Five of the eight deaths indicated in the miscellaneous area of involvement (Table 4) were due to uremia. Only three of the patients who died from uremia were submitted to autopsy, and each showed extensive nephrosclerotic changes in the kidneys. Out of the eight patients, two died of postoperative intra-abdominal hemorrhage and one from massive hemorrhage in the gastric pouch.

TABLE IV

Partial Gastrectomy for Massive Hemorrhage
Fatalities Related to Area of Involvement in 176 Patients

Area of Involvement	Deaths
Pancreaticoduodenal	1
Cardiopulmonary	8
Miscellaneous	8
	17 (9.6%)

An analysis of this group indicates that patients with diseased myocardium or kidneys are poor surgical risks, and suggests that their chance of survival would be better under conservative therapy.

Treatment for Perforated Peptic Ulcer

In our hospital we treat, on an average, 20 patients a year with perforated peptic ulcer, and in the past 25 years, 514 patients have been admitted with this diagnosis. Only four of our patients have had a primary gastrectomy, and on each occasion it was because the perforation was discovered at the time of a planned elective procedure. The rest, excluding eight moribund patients, were treated by simple closure of the perforation, or by omental graft. The over-all mortality for perforated ulcer has dropped from 17 per cent, as of 1930-1940, to 5.2 per cent during 1950-1954.

Summary

This report reviews briefly the evolution of surgical procedures employed in the treatment of peptic ulcer, starting with Billroth I and II as the basic patterns for gastrectomy in its various forms.

At the present time, elective resection for gastric ulceration is indicated on the basis of two factors— intractable symptoms and the suspected presence of malignancy.

The results of gastrectomy for gastric ulcer are almost uniformly good, particularly when the ulcer is located in the main body of the stomach. Gastrojejunal ulceration is a rare sequel.

Certain types of ulceration present difficulties in removal: One type is the large antral ulcer in the immediate pre-pyloric area that penetrates into the pancreas; another type is the ulcer of the lesser curvature that presents certain gross characteristics suggestive of malignancy, particularly when located juxta-esophageal.

In treating gastric ulcer, a 2/3 gastrectomy of either the Billroth I or II type will ordinarily give satisfactory results. Vagotomy, added to the procedure, would seem to have no advantage.

At Roosevelt Hospital, 151 elective gastrectomies for gastric ulcer were performed during a recent 11-year period (1946 through 1956); there were four operative deaths, a mortality of 2.6 per cent.

For duodenal ulcer, surgery is indicated for those patients who continue to have symptoms following an episode of perforation or severe hemorrhage. Surgery is also beneficial in patients who have not responded to medical treatment or have not adhered to a prescribed regimen.

The procedure of choice for duodenal ulcer is partial gastrectomy, except in very aged or debilitated patients who cannot safely tolerate the operation. The experience with 573 elective gastrectomies for duodenal ulcer with a mortality rate of 4.5 per cent, indicates that this procedure can be a formidable one.

At Roosevelt Hospital, the incidence of massive bleeding from duodenal ulcer has been found to be three times greater than that from gastric ulcer. Three ways of treating massive hemorrhage are discussed. We use the conservative expectant approach, which entails gastrectomy for those patients who do not cease bleeding within a reasonable length of time. In most instances, the bleeding ulcer is removed with the resected stomach. A contraindication to surgery for massive bleeding is known disease of myocardium and kidneys.

The great majority of perforated ulcers are located in the duodenum, on the anterior wall; these are treated by simple closure or free omental grafts.

With occasional variations, the technique of gastrectomy as performed in about 90 per cent of cases at the Roosevelt Hospital is briefly as follows: An ante-colic 2/3 to 3/4 resection of the Poyla type with the Hoffmeister modification, with the proximal loop comparatively short in length and placed on the lesser curvature side.

Acknowledgments

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30 E. 72nd St.

EATING ESTABLISHMENTS AND NURSING HOMES GET STATE REGULATIONS

STATEWIDE REGULATIONS for eating establishments and revised regulations for nursing homes and homes for the aged were adopted by the State Board of Health October 9.

The Board, meeting in Atlanta with Fred H. Simonton of Chickamauga as chairman, also approved a new, simplified birth certificate for use by the Georgia Department of Public Health. A resolution was passed supporting the establishment of future nurses' clubs in high schools, a program sponsored by the Woman's Auxiliary to the Medical Association of Georgia. The stand of organized medicine in opposing quackery in the treatment of cancer was also endorsed by the Board, which encouraged the State Board of Medical Examiners to take action against quacks.

Eating establishment regulations, effective Janu-

ary 1, will be enforced by local health departments. The 1958 General Assembly provided for the regulations, and about 10,000 establishments will be affected. There will be no ABC grading system. Permits will be issued to establishments which comply with regulations, and refused to those which do not. Inspection is required at least once every six months.

The regulations will affect floors, walls and ceilings, doors and windows, lighting, ventilation, toilet facilities, water supply, handwashing facilities, construction, cleaning, storage, display, insect and rodent control, cleanliness of employees, and neatness and cleanliness of premises.

Revised nursing home regulations emphasize the role of local health departments in licensing and enforcement. Improved definitions of nursing homes and homes for the aged are given.

Favorable results are described in the treatment of a hundred patients
with non-infective conjunctivitis.

CLINICAL EVALUATION OF TETRAHYDROZOLINE OPHTHALMIC SOLUTION

TETRAHYDROZOLINE, DL2-(1, 2, 3, 4 tetrahydro 1-naphthyl) imidazoline hydrochloride, is a sympathomimetic agent, a vasoconstrictor, and decongestant. Tetrahydrozoline has no known anti-bacterial or anti-viral action. Numerous investigators¹⁻⁹ have reported on its pharmacology and its effectiveness as a nasal decongestant. Grossman and Lehman¹⁰ have reported on the ophthalmic use of tetrahydrozoline, chiefly in the treatment of the non-infective types of conjunctivitis. The present study was undertaken to further evaluate the effectiveness of the local administration of the ophthalmic solution in certain types of conjunctivitis.

Procedure

In order to carefully examine the effects on the eye and conjunctiva, drops of an 0.05 per cent aqueous solution of tetrahydrozoline* were instilled into 12 normal human eyes and 12 drops with conjunctival hyperemia from various causes. The patients ranged in age from seven to 80 years. One or two drops were instilled into each eye every one to five minutes for a total of five to ten doses. The patients were kept under observation for several hours following administration. The rapidity of onset of decongestant action and symptomatic relief, the duration of effectiveness, and the presence of undesirable local side effects such as burning, irritation, rebound congestion of the conjunctiva, and pupillary dilatation, were noted.

Vasoconstriction of the conjunctival vessels began immediately. Grossly, there was a blanching of the hyperemic areas. When observed with the corneal microscope, the smaller vessels of the conjunctiva disappeared and the larger ones decreased in caliber. Symptomatic relief of itching and irrita-

J. Jack Stokes, M.D., *Atlanta*

tion was almost as prompt. In no instance was burning or stinging caused by instillation of the solution. Vasoconstriction lasted from 30 minutes to several hours. Rebound vasodilatation of the conjunctival vessels, pupillary dilatation, and systemic effects did not occur in any case.

These preliminary results indicated that tetrahydrozoline ophthalmic solution could be used freely without harmful effects. The solution was then dispensed to patients with conjunctival inflammation. Each patient was given a supply of tetrahydrozoline ophthalmic solution to be instilled in doses of two drops every two to four hours. If this dosage did not adequately control the symptoms, they were instructed to use the solution as frequently as they wished, then lengthen the interval between instillation as soon as the symptoms were relieved. Many patients used the ophthalmic solution several times daily for periods of six months or longer. When used concurrently with other indicated ophthalmic preparations, the tetrahydrozoline did not interfere with the effectiveness of the other drugs nor did it appear to potentiate their effects.

One hundred cases of conjunctivitis were treated with tetrahydrozoline ophthalmic solution over a study period of 12 months. The cases treated were vernal conjunctivitis, either palpebral or limbal; allergic conjunctivitis characterized by a diffuse dilatation of the palpebral conjunctival vessels, a lesser involvement of the bulbar conjunctival vessels, and few or no papillae; and chronic catarrhal conjunctivitis. These three types of conjunctivitis are important because they may persist for years, causing considerable patient discomfort. Except in those cases of chronic catarrhal conjunctivitis with an infective element, antibiotics are of no value in their treat-

From the Department of Ophthalmology, Emory University School of Medicine.

*Tetrahydrozoline—available from Chas. Pfizer & Co., Inc. as Visine Eye Drops.

ment. The adrenal steroids often are helpful but may cause serious complications if used in certain types of corneal and conjunctival infections and are expensive, particularly when used for extended periods.

In order to eliminate the bacterial infections from the series, blood agar cultures of conjunctival secretions were made on the first few cases. This procedure was abandoned because all the cultures were negative, indicating that the clinical picture was usually sufficiently typical to permit separation of the bacterial and viral infections from the allergic conjunctival infections.

Results

Symptomatic relief was secured in 84 per cent of the cases of conjunctivitis treated. The degree of relief varied from fair to excellent. The remaining 16 per cent stated that they secured little or no relief from the use of tetrahydrozoline. Some of these required other local medication. There was complete absence of undesirable side effects, both local and systemic, although an occasional patient complained of a transient stinging or burning following instillation. No untoward changes occurred in the conjunctivitis or other ocular tissues regardless of the length of time tetrahydrozoline was used.

Conclusion

Tetrahydrozoline is an active conjunctival vasoconstrictor and decongestant. It is a safe and effective

replacement or adjunct for many of the ophthalmic preparations now commonly used in the treatment of non-infective conjunctivitis.

384 Peachtree St., N.E.

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GOVERNMENT, KEEP OUT!

"Never since the initial discussions of it has socialized medicine had so little appeal in the United States." Thus writes Herbert R. Mayes, editor of *Good Housekeeping*, in the 75th anniversary issue of *The Journal of the American Medical Association*. He goes on: "This is due in part to the depressing reports emanating from European lands where such practice is common, but in much larger part to the eminently satisfactory experience Americans have and have had with medicine in their own country. This satisfaction, it should be noted, does not go quite so far to embrace the cost of medical care because, even with the advent of many health insurance organizations, American families find the cost of medicine, particularly in the realms of surgery and chronic illness, almost more than they can cope with. But they will cope, in preference to hav-

ing the federal government participate."

The economic problems connected with medical care are being given the closest kind of study by medical groups, insurance organizations, and other interested parties. There is very real hope that the magnitude of the problem will be steadily reduced. As an example, policies covering catastrophic illnesses of long duration find an increasing acceptance.

As for socialized medicine, the pressures for it have been political. There is absolutely no evidence that any large segment of the public wants it. A medical profession, free of political control, has done wonders for the health of the American people. If we are to have the maximum of progress in the future, it must be kept free.

—*Rome News-Tribune*

*Methods of preventing post-traumatic strictures
are discussed and means are outlined for their plastic repair.*

CICATRICAL STENOSIS OF THE LARYNX

Truett V. Bennett, M.D., *Atlanta*

SCAR TISSUE STRICTURE of the larynx has always been a challenging surgical problem. In previous years, most of the cases were complications of infections such as tuberculosis, syphilis, and diphtheria. Now that we have better defense against infections, the chief etiological factors may be listed as trauma, surgery, congenital defects, and the occasional necrosis of cricoid cartilage from an excessively high tracheotomy.

Pathology

The obstructing cicatrix may be between the vocal cords as adhesive bands or webs, in the subglottic region, or in the upper trachea. Rarely, the supraglottic region may be bridged over by scar tissue as the result of corrosive burns or such diseases as pemphigus. The complicating feature of many of these cases is that the cartilaginous supports have been deformed by fracturing and overlapping of the fragments or by actual loss of cartilage by necrosis. Also, when there has been extensive trauma, there may be a bilateral abductor paralysis of the vocal cords to further complicate the picture.

Diagnosis

In evaluating a case of chronic laryngeal stenosis it is important, in the case of an inflammatory or neoplastic etiology, to be certain that the primary disease is eradicated before definitive treatment is

done. Also, in order to plan the treatment, one should diagnose as accurately as possible the site, extent, and complicating features of the stenosis. A thorough examination with the laryngeal mirror and a lateral X-ray of the neck will in most cases provide enough information for a working evaluation, although sometimes a direct laryngoscopy is necessary. Another means of demonstrating the pathology is retrograde examination by means of a nasopharyngoscope through a tracheotomy. A slight stricturing may be compatible with normal activity and cause only noisy breathing on exertion and no significant disability. Surgery will probably not improve that situation very much and as a rule will not be indicated. However, when there is enough narrowing of the airway to interfere with normal activity, something should be done. Most strictures that we see are extensive enough to require a tracheotomy and thus leaves no doubt as to the need for surgery.

Treatment

Any patient who has enough trauma to the larynx to cause edema and obstruction probably has fractures of the thyroid or cricoid cartilages. These cases usually require emergency tracheotomies, and are best further treated within a few days by a thyrotomy, manipulation of the cartilage fragments, and insertion of a plastic (acrylic) mold within the lumen of the larynx which should remain at least six weeks. If a stenosis can be prevented by this method, the end result will be much better than if a corrective operation is done later.

In correcting a chronic stenosis there are several procedures from which to choose, depending on the situation.

The simple strictures from scar tissue alone without cartilaginous deformity may be successfully treated by dilation endoscopically. However, the dilation must be done at least once a week over a long period of time and is not practical in most cases.

Most cases are best treated by an external approach by way of a thyrotomy. If a tracheotomy is not already done, it should precede the corrective surgery and should be placed as low as possible. With the tracheotomy done, a general anesthesia may be given and the larynx opened up by a midline incision (thyrotomy). If the stenosis is caused by adhesions between the vocal cords, these adhesions may be cut and a tantalum keel introduced between the cords after the technique of Woodman.¹ This keel is folded over on the outside of the thyroid cartilage in order to hold it in place. If, after these adhesions are divided, there still appears to be insufficient airway due, perhaps, to some distortion of the skeletal support or fixation of the cords, I prefer to use a bone graft between the two alae of the thyroid cartilages and the use of an acrylic stent as described by Woodward.² The hyoid bone is easily exposed and a section is taken from its body. Small holes are drilled in the edge of the bone and it is secured to the edges of the thyroid ala with chromic cat gut in such a way as to prop the larynx open and thus obtain more space for airway. In the meantime, an acrylic stent modeled from an O'Dwyer entubation tube has been placed in the lumen of the larynx and secured there by tantalum wire (figure 1). These wires may be bent down along the outside of the thyroid cartilages so that they will pull free when the stent is removed endoscopically about six months later. The stent can be made by any good dental laboratory if they are provided with an O'Dwyer entubation tube to use as a model. They should be specifically instructed to make a lumen in the stent as this adds greatly to the patient's comfort.

This technique is also very useful in treating strictures in the cricoid area when there has been some loss of cartilage.

For the very extensive strictures, especially when the trachea is involved, I prefer the skin grafting technique as described by Erich.³ If this type of operation is necessary, the tracheotomy should be large and at least 1-2 cm. below the stricture. The stricture is exposed by a midline incision through the larynx and trachea and is excised by sharp dissection. A split thickness skin graft is then obtained and sutured around a cylindrical piece of foam rubber sponge with the raw surface outward. This is then inserted into the area of the stricture and held

in place by heavy silk sutures that go through the rubber mold and other structures and is tied externally to the skin. A heavy silk suture is also placed through the foam rubber and is brought down through the tracheotomy to be tied to the tracheotomy tube. After ten days the foam rubber mold is extracted through the tracheostomy, leaving the skin graft healed to the raw surfaces. A model for an obturator is then constructed out of an appropriate size rubber tube and dental compound, and while this is being reproduced in acrylic by a dental laboratory, the foam rubber cylinder is again placed in the strictured area. The obturator must have a lumen, fit into the grafted area, and have a lip that protrudes out through the tracheostomy and still leave room for a tracheotomy tube. The foam rubber is again removed and the obturator inserted where it is left in place for six months. It is comfortable and usually requires no special care. After



Figure 1: X-ray of neck showing an acrylic stent in the larynx. A section of hyoid bone has been grafted between the alae of the thyroid cartilages.

six months the obturator is removed and if the airway is satisfactory, the tracheostomy is closed. If the tube is left out of the stoma for about a month, it will close partially by itself and simplify the surgical closure. Occasionally, the stoma may be large enough to require multiple stages in order to close them.

Sometimes one finds the trachea completely separated from the larynx and it becomes necessary

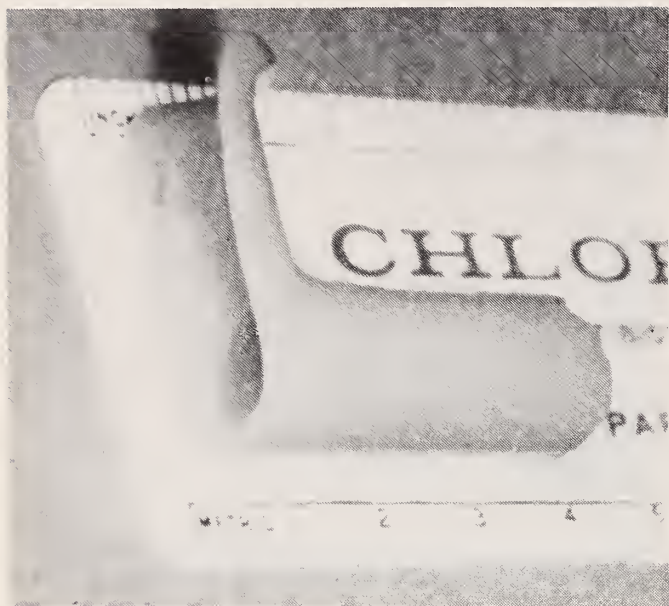


Figure 2: An acrylic obturator which was used in a trachea to prevent contracture of scar.



Figure 3: Obturator in place after excision of stricture and skin grafting has been done. This was left there for six months.

to do an end to end anastomosis after the trachea is mobilized. An acrylic stent should be used in this case and left in place for at least six months (figure 4).

Case Reports

1. A 23-year-old male had worn a tracheotomy tube and had been unable to get any air through his larynx since an automobile accident three years previously. He was referred to the Ponce de Leon Infirmary where examination and X-ray showed a complete stricture at the cricoid and upper trachea and a bilateral paralysis of the vocal cords. The tracheostomy was enlarged and the larynx opened up. A complete stricture was found, destruction of the anterior half of the cricoid, and loss of at least one



Figure 4: This patient had a complete stricture with loss of cartilage. An end-to-end anastomosis was done. A section of hyoid bone was grafted in area of cricoid and the acrylic stent (only the metal core of the stent shows on X-ray) was wired in place.

tracheal ring. The trachea was dissected free downward, brought up and anastomosed to the remainder of the cricoid. A section of the hyoid was grafted to bridge over the defect in the cricoid, and an acrylic stent was secured in place by a tantalum wire. He

was able to talk for the first time in three years. After about six weeks he coughed up the acrylic mold. The lumen shrank down as would be expected and on reopening of his larynx about two months later he was found to have an epithelized lumen about 4 mm. in diameter. This was a big improvement on his original state, however. The Erich technique of skin grafting was then done after the scar tissue was excised. To try and avoid the necessity of an arytenoidectomy later for the paralyzed vocal cords, a portion of the vocal cords was removed submucosally and the acrylic obturator was constructed long enough to fit between the cords. After



Figure 5: This large tracheostomy was closed by inversion of skin edges and a sliding flap.

fistula and granulation tissue in the anterior commissure which promptly subsided after removal of a small sequestrum of bone by laryngoscopy. She was then decannulated and the tracheostomy allowed to close spontaneously.

4. A 45-year-old woman developed a chronic stricture following removal of a tracheal tumor ten years previously. On opening the trachea, a stricture of scar tissue about 1 cm. long and with a lumen of only about 3 mm. in diameter was found. The scar tissue was excised and the Erich technique of skin grafting and construction of an acrylic obturator was done. The obturator was left in place for

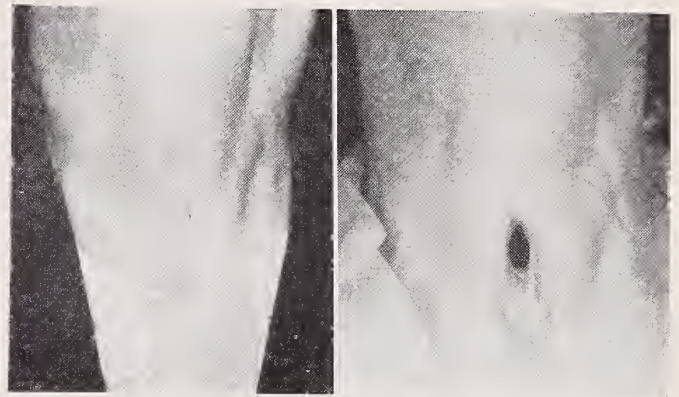


Figure 6: This tracheal stoma was closed by a simple plastic procedure.

six months the obturator was removed. He had a good lumen and the vocal cords remained fixed in abduction. The large tracheostomy was closed in one stage with inversion of the skin about the edges and a sliding flap (figure 5). A check-up one month later showed him to still have a good airway and he had resumed his job of brick-laying.

2. A 45-year-old woman had several procedures done for correction of a bilateral abductor paralysis of the vocal cords. She developed adhesions between her vocal cords and remained dependent upon her tracheotomy. A thyrotomy was done, the adhesions divided, and the Woodward technique of grafting a piece of hyoid bone between the alae of the thyroid cartilage and leaving an acrylic stent in the lumen was done. The stent was removed after six weeks and she was able to be decannulated a month later.

3. A 35-year-old female has remained dependent upon a tracheotomy three months following an automobile accident. A thyrotomy was done and there was found to be diminished AP diameter presumably due to fracture of the cartilages. The lumen was increased by using a bone graft between the alae of the thyroid cartilages and an acrylic stent was left in place. After two months, the stent was removed endoscopically. She developed a cutaneous

six months (figure 6) then removed through the tracheostomy. Examination with a small mirror in the tracheostomy showed the lumen to be adequate and lined with epithelium. The tracheotomy tube was removed and after a few days the opening had contracted enough that a simple closure (figure 6) of the stoma could be done.

Conclusion

Strictures of the larynx offer a difficult challenge at times, but the use of skin grafting, hyoid bone grafting, and especially the use of acrylic in forming stents and obturators help to solve almost any problem. Many of the post-traumatic strictures could be prevented or at least minimized by proper treatment within the first few days after the accident.

*Ponce de Leon Eye and
Ear Infirmary*

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THE CHILD AS A GYNECOLOGICAL PATIENT

This age group has been neglected in many cases because of the physician's lack of experience with or awareness of his problem in this area.

Dan Bruce Kahle, M.D., *Atlanta*

THE IMPORTANCE OF an increasing awareness toward the gynecological problems encountered in infants, children, and the "teen-age" adolescents needs emphasis. Although limited, the experience of the gynecologist's first years in practice serves to underscore the frequency and variety of such problems. It presents an immediate challenge and need for his services. Too frequently he finds himself unprepared not only in didactic knowledge and actual experience, but lacking the emotional stability and personal maturity so vital to understanding and successfully managing these young patients.

The medical profession is indebted to the pioneer work so "singularly undertaken" by two physicians whose names are synonymous with this phase of gynecologic practice. Approximately ten years ago, Dr. Goodrich Schauffler and Dr. Edward M. Allen, under great personal abuse, lighted the first candle which was soon to throw ever-increasing light upon the taboos and unintelligent thought concerning the examination and treatment of young females.

It was not only necessary to enlighten the parents, but social and legal workers as well, including the medical profession itself. Those who have encountered the self-righteous, but genuinely frightened, hysterical mother standing over her similarly terrified daughter and relating the circumstances *she* believes responsible for the foul greenish-yellow discharge which stains the child's underclothing, will understand the difficulties these men encountered.

Not all opposition and fear has abated, for many physicians fail to be impressed and seem unable or unwilling to enter into the education and reassur-

ance of both parents and child. They continue to overlook obvious disorders which, with proper examination and often simple treatment, will rapidly respond. They fail to understand the needs of this growing female who at present is but a child, yet who is adopting the functions and attributes of the adult in the field of sex. These failures constitute the important problems confronting us, and every physician whether he be gynecologist, family physician, or pediatrician must constantly strive to expand this field and endeavor to have its truths more widely accepted.

This morning time limits us in our discussion concerning the wide variety of problems encountered. Only a few of the more important ones will be discussed.

Anatomical Relationships Peculiar to the Child

The outstanding anatomic difference of the immature female genitalia as compared with the adult genitalia include a more anterior location of the introitus and a relative prominence of the clitoris which may normally measure 1.0 to 1.5 cms. The thin, uncornified vaginal epithelium imparts a redness to the visible mucosal surface which is frequently mistaken for inflammation. The total uterine size is 2.5-3 cms; there is a reversal of the corpus-cervix ratio; before puberty the cervix comprises $\frac{2}{3}$ the size of the entire organ. The uterus is horizontal rather than anterior in position. Because of the very short posterior fornix, vaginal palpation is actually less informative than rectal examination. An alkaline medium in the vagina is characteristic of the prepubertal patient. The characteristic cells seen in a vaginal smear are parabasal and a few intermediate type cells.

Following are some facts regarding specific anatomic organs or areas. *The clitoris*, a rudimentary penis in the female, is structurally identical on a small scale, with the male organ. An unusually large clitoris in the child does not always mean an intersex problem but may only be the result of excessive masturbation. *The hymen* is not the flat "unpenetrable wall" or diaphragm which was adventitiously described before people had studied these matters. It is a cuff-like, thick, fleshy membrane which protrudes at its orifice when the child strains down or coughs. This organ is highly vascular and exquisitely sensitive except in infancy. However, prior to the second year and for two and three years later this peculiar sensitivity is not highly developed, thus the basis for the easy availability of intravaginal examinations in these young children compared to older ones, especially the adolescent. One last thought is to recall for you the amazing variability of the hymenal orifice. *The Bartholin glands* are not well developed prior to nine years of age, thus we rarely see infection of these glands in this age group. *The vagina* is best described as a fluted, accordion pleated structure. This is characteristic of the vagina in infancy and early childhood. In these early years this cavity is only a potential one; its walls are adhesive in the same manner that wet paper sticks together thus occluding the cavity. This plus the restricted hymenal orifice accounts for the young vagina being such "a reservoir of infection." *The cervix* in immaturity lies in the axis of the vagina; later swings backward as the uterine axis swings forward. Fluhman believes that the endo cervix shares its embryological origin with the upper vagina thus the cervical glands evolve by a subtle epithelial change from the characteristic vaginal type. *The uterus* is very small and straight on its axis rather than antiflexed and actually retroverted between one and two degrees. The relative size from age one to seven is about that of an olive or smaller. *The ovaries* are perhaps afunctional structures (adult type cystic formation has been reported). The miniature ovaries are subject to cysts, dermoids, and teratomas. Any palpable ovary in a female under 10 years of age is significant.

Examination of the Young Female

The successful gynecological examination of the young girl depends more upon parental cooperation and understanding than any other factor. Parmelle has said, "the false modesty and puritanism which precludes this type of pelvic examination exists in the doctor, I fear, more than the patient or her mother." There are very rarely obstacles encountered in the complete examination of the child that tact and discretion on the physician's part cannot overcome. Schauffler believes that "the morbid, even

maudlin" attitude of many adults, and we would include physicians, toward the taboo areas in the female child is often the worst problem in management.

It is illogical to ignore this most important area of the little girl's anatomy around which her emotional and reproductive life revolves. This antiquated thinking regarding female organs carries grave risks to the psychic as well as physical well being.

"Too little too late" can be properly applied to the cursory inspection of the newborn female and the premarital examination is too late and frequently inadequate. The initial gynecological examination should be at birth—a young woman should not have to learn during her premarital examination that a vagina does not exist. Too often patients such as these do not have the advantage of a premarital examination and months after their marriage, because of sexual difficulties, seek medical advice. Then and only then do they learn of their deficiencies. This type of heart break can be prevented by earlier and more frequent examination of young females.

A greater and more conscientious effort to obtain valued history from both mother and child is an essential to handling the problems encountered.

The equipment necessary for this early examination is not elaborate. The short Kelly cystoscope or vaginoscope and a pair of long grasping forceps constitute the really essential special equipment.

The knee chest position has been recommended by many for examining these young children but we have found the lithotomy position quite satisfactory and employ the knee chest position only on certain occasions. The nurse is a very important factor in the successful examination of these young patients and we almost always insist on the absence of the mother. Patience and gentleness are attributes essential for the physician. An important technique for the physician to employ in dealing with these young children is a careful and detailed explanation prior to each step in the examination. This reassurance frequently will mean the difference between success or failure. An established routine is basic to proper conduct of the examination. Absolute identification, for example, of the urethra and the hymenal orifice is essential. Fumbling and lack of confidence make for serious difficulty. It is frequently quite illuminating to examine the undergarments of these little girls and for this reason parents are instructed to bring soiled underclothing with them. Many conditions are easily diagnosed by inspection of the external genitalia and rectal examination.

Rectal Examination

Rectal examination is well tolerated by these

young patients. The combined examination originally described by Shauffler provides a valuable aid in outlining the lower genital tract. By diverting attention away from the vagina by rectal examination, a cotton tipped applicator moistened in saline or a metal uterine sound is rolled into the vagina. The entire vaginal vault can be readily palpated between the rectal finger and the instrument in the vagina. The small Kelly cystoscope or vaginoscope can be painlessly inserted for visualization of the cervix and vaginal interior. In the vast majority of problems encountered this type of examination will suffice. It should be emphasized that rather than inflict pain and instill "fear" in our little patient thus jeopardizing future relationships, examination under anesthesia is justified and recommended.

Although the total number of children seen at The Buckhead Clinic by the gynecologist regarding gynecological disorders is small, numbering 32, a rather characteristic variety of disorders were encountered. This number is significant because these children were seen in the first year and a half of the gynecologist's practice.

The variety of disorders encountered were:

(1) Vulvovaginitis	18
Candida	3
Trichomonas	2
Non-specific	10
Herpes genitalis	1
Staphylococcic	2
(2) Trauma	3
(3) Labial agglutination	2
(4) Foreign bodies	4
(5) Precocious puberty	1
(6) Imperforate hymen	1
(7) Urethritis	1
(8) Hypermennorhea	2
(9) Dysmenorrhea	2
(10) Pregnancy	1

Not only were the disorders encountered of a considerable variety, but it is of interest to note that of the 32 patients seen in 1955 to 1956, eight were in the range of birth to five years of age, 17 from five to ten years of age, and seven from ten to 17 years of age. From these figures you can see that the problems of the five to ten year old are the most frequent and, of course, it is in these young girls that the greatest difficulties in examination are encountered; it is in this group that the parental cooperation is absolutely necessary. Once this co-operation is made, quite simple and routine pelvic examination is possible.

Vaginal Disorders

Vulvovaginitis: Schauffler states that "in child-

hood this should be written "vaginovulvitis" because the vaginitis is consistently primary, the vulvitis being due mostly to external irritation from the vaginal discharge." In the past most vaginitis has been due to gonorrhea. Gonorrheal infections have, as a rule, been easier to cure than other types but all infections of the vagina in the immature patient may now be regarded as minor complaints, simple and inexpensive, though sometimes stubborn to cure or to control.

Childhood "vaginovulvitis" can be divided into two large groups:

Childhood "Vaginovulvitis"	
Specific	Non-Specific
1. Gonorrheal	1. Contamination (Fecal)
2. Mycotic (Candida)	(a) Pinworm migration
3. Trichomoniasis	(b) Poor anal care
4. Diphtheritic (rare)	2. Contamination (digital)
5. Pneumococcic (rare)	(a) U.R.I.
6. Bacteroides (rare)	(b) Skin infections
7. Hemophiles-vaginalis	
8. Staphylococcic	

In our limited experience the non-specific types have been seen most frequently and exhibit the widest variety in symptomatology. In some instances the infection is mild. The mother brings the child in because of stained undergarments and upon examination we see slightly reddened vulvo-vaginal mucosa and a scant greyish mucoid discharge. In other instances we see the child who suffers great pain, itching or dysuria, or all of these on occasion; the discharge is heavy and purulent and over half of these patients are between ages five and ten. The factors responsible for such non-specific type infection are contamination of the external genitalia by fecal material transmitted by underclothing and/or improper anal cleansing after defecation. There is a rather frequent and more than coincidental appearance of such vaginitis, following U.R.I. and episodes of diarrhea. Foreign bodies result in such infections and one always considers them when there is infection of the lower genital tract.

A fact, previously mentioned and not to be forgotten, is that the immature vagina, unlike that of maturity, is an ideal "harbor of infection". It is a tiny, moist, potential cavity, distensible, but held almost shut by its thick, accordion pleated walls. In these respects it differs from the mature vagina which does not primarily harbor primary bacterial infections. The immature cervix is a tiny, tubular, almost capillary canal with virtually no gland structure. It is *not* a harbor of infection. The adult cervix is notoriously a harbor of infection with its complicated racemose gland structure. In the child we have a completely reversed situation from the adult in relation to infection.

Another fact to keep in mind is that the normal

immature vaginal epithelium is under a hypoestrogenic effect almost comparable to that of senility. This epithelial peculiarity not present in the adult also favors primary vaginal infection. These are important in helping us understand the residual or obstinate vaginal discharge which cannot be cured by ordinary routines. Certain conditions encountered rather frequently emphasize the need to understand the relationship of estrogen to vulvovaginitis in childhood. These conditions are (1) intractable vulvar irritability with or without vaginal discharge (non-infectious), (2) sealing or adhesions (agglutination) of labia minora, (3) leukoplakie dessicans and kaurosis of vulva in children, and (4) typical hypoestrogenic "senile vaginitis" in children.

Exaggeration of the estrogen effect, out of its normal place, also creates a condition which accounts for a few of these stubborn cases. This is the common discharge which precedes onset of menses. The discharge is thick, almost cottage cheese type—without symptoms. Other types of discharge are seen from overtreatment with estrogen in these young girls.

Vaginal Trichomoniasis

Vaginal trichomoniasis seldom occurs in children before menarche. When it does occur the discharge is abundant and bubbly, diffuse or punctate vaginitis develops, and there is pruritis. Hanging drop preparation will make the diagnosis. Vaginal suppositories (Viform®) inserted nightly preceded by vaginal lavage with a weak lactic acid solution, will cure 90 per cent of cases in a relatively short time.

Candida Infections

Candida infections are uncommon but not rare in children. Characteristically it produces a diffuse hyperemic inflammation of the affected mucosa, a white, curd-like discharge, and pruritis. Antibiotic therapy is frequently the history obtained a few weeks prior to the onset of symptoms. Growth on Nickerson's Media (by Ortho) makes the diagnosis simple and accurate. One per cent aqueous gentian violet solution in the vagina and twice daily lavage with weak alkaline solutions usually results in prompt cure.

Foreign Bodies

Vaginal bleeding in the infant or young girl is abnormal and demands immediate attention. Pain when associated with vaginal bleeding strongly suggests a foreign body. The types of objects found in the immature vagina are widely varied and at times "shocking". They range from bits of paper, crayons, candies, and particles of food, to marbles, "coke caps", buttons, hair curlers, hat pins, nail files, safety pins (open), sticks, and even an open pocket knife. Aside from the trauma that may be inflicted, vaginitis is almost always coexistent.

The most common foreign objects are fragments of clothing, woolen ravelings from bedding, or small pellets of paper. The child usually denies insertion of such objects and the doctor should be prepared for an indignant, caustic attitude on the parents' part when such a possibility is suggested. In fact, they may be more stubborn about admitting such a possibility than the child herself. Repetition of such activity on the child's part is characteristic and the parents should be so instructed.

The coexistent vaginitis, depending somewhat upon the severity, will respond promptly to removal of a foreign body. Occasionally, antibiotics are needed. If the infection persists after removal of the object and antibiotic therapy for five to seven days, then 0.1 mgm of Stilbesterol® daily for 10-20 days will usually solve the problem. Oral administration is performed in these young girls because of the difficulties encountered when one tries to insert vaginal suppositories. A more uniform estrogenic effect is obtained and the gastro-intestinal upsets associated with oral estrogen are rare in children. There should be no alarm concerning the breast stimulation which readily results. This disappears with equal rapidity after stopping estrogen therapy.

Direct visualization affords the best means of diagnosis. The vaginoscope or long nasal speculum serve well in this regard. X-ray alone is not adequate, as many objects are not radio opaque. However, if there is a question of migration of the foreign body, X-ray is extremely helpful in locating the object. A simple but very effective method of diagnosis employs the technique of Schauffler, previously described, which utilizes the rectal finger and sound in the vagina thus detecting the foreign body in the vagina between these two objects.

Trauma

Accidental injuries are relatively uncommon. Most of them occur when the young girl falls astride a sharp object, the so called "picket fence" type injury. Self inflicted wounds are rare but do occur. Rape obviously results in traumatic injury. The treatment is surgical and will vary depending upon the type and extent of the injury. In almost every instance a general anesthetic is advisable for obvious reasons. There is need to emphasize reassurance again. It is very important that both parents and the child understand that no permanent damage has been done. Failing to do this may reap far greater damage than the injury itself.

Agglutination of Labia

Transagglutination of the labia across the midline to occlude the vestibule is a common occurrence not often noted in newborns but more often in older

babies. Occasionally it recurs persistently in younger children. Its control seems greatly facilitated by application of estrogenic ointments.

Imperforate hymen may be identified in infants and children but generally doesn't become evident until beginning menses. Usually there is no symptomatology with beginning of menses. When a single unruptured hymen is recognized in a baby or a small girl it is probably best not to procrastinate unduly. A careful examination can be conducted under anesthesia. A sound is placed in the urethra and finger in the rectum for protection prior to incision of the imperforate hymen.

Prolapse of urethra in the female child is rare but if it is encountered and not recognized, treatment efforts may result in much damage.

Menstrual Function of the Adolescent

The majority of girls begin to menstruate at about 13 years of age. Regular menstrual cycles are no longer accepted as evidence of normality, but instead, a normal variability is recognized. They may vary from 19-60 or more days in length and yet the individual may be in perfect health and quite fertile. The problem of irregular menses in the adolescent is quite different from that of the adult. Most commonly seen in this age group is "the longer interval between flow" type of cycle. Amenorrhea is quite frequent at this age but this must not be confused with the primary amenorrhea wherein the young girl has never menstruated. In the adolescent the existence of a high proportion of anovulatory cycles is not a clinical entity demanding treatment. It does, however, explain the characteristics of this age:

(1) Low incidence of primary dysmenorrhea during early years of menstruation.

(2) Relative sterility exists in adolescents.

(3) Hyperplasia of endometrium and excessive uterine bleeding is not uncommon.

Abnormal Bleeding

Abnormal bleeding in this adolescent period always is cause for concern. It demands recognition and prompt treatment since it may threaten the patient's life and good health. In rare instances the cause for such abnormal bleeding can be found in gynecologic or systemic diseases, for example, fibromyoma of the uterus or blood dyscrasias or even carcinoma of the cervix or fundus. By far the more common cause of abnormal uterine bleeding in adolescent girls is "hyperplasia of the endometrium." This is recognized as an endocrine entity but the underlying cause is unknown. The disease in the beginning of menarche is self limited and there are no curative measures short of radical operations or

irradiation. There are three aims, however, of proper treatment:

1. To control bleeding promptly.

2. To correct any anemia that may exist or result from such bleeding.

3. Accompanying disturbances such as obesity, malnutrition, or hypothyroidism must be corrected.

To control bleeding, administer large doses of estrogen first, then progesterone to bring about "medically produced menstruation". The use of progesterone continued times two or three months. We feel that dilation and curettage should be carried out more frequently in these young girls. It controls the bleeding most promptly and in many instances gives permanent relief. Irradiation is contraindicated and hysterectomy is almost never necessary.

Dysmenorrhea

Most young girls during the early menstrual years are not troubled with dysmenorrhea. At times, menstrual pain is manifested only at occasional periods of flow. It is essential to reassure the patient concerning these painful periods so that she does not associate them with serious pelvic disease. These painful periods are most usually the result of ovulatory cycles which infrequently occur at this time.

In some instances, however, dysmenorrhea accompanies the first menstruation and it is in this area that psychogenic factors play such an important role. It is not our belief that the psychogenic factor is the entire etiologic factor but we certainly recognize its importance. Treatment of this condition today differs sharply from some 30 years ago. There is great emphasis on educational and general measures, not on drug medication, hypodermic injections, or surgery.

Treatment

1. The first essential of treatment is ruling out possible pelvic or systemic disease and if found, treatment of an appropriate type should be carried out.

2. Reassurance of the young patient is next. Give her a sensible explanation of menstruation and etiology of pain. A sympathetic discussion is of unmeasurable help.

3. Development of normal routine for healthful living with emphasis on regular hours, good balanced diet, fresh air, and increased outside interests.

4. Exercise is important and should be encouraged, even during the time of actual flow.

5. Symptomatic measures should be instituted during severe attacks of pain:

(a) bed rest

(b) bowels should be kept open

(c) heat to the lower abdomen

(d) A.S.A. with or without codeine and Edri-

sal® with or without codeine should be used as indicated.

6. Hormones are of no real value except to temporarily inhibit ovulation thus possibly producing pain free cycles for a relatively short period of time.

Premenstrual Tension

We have no statistics available to us on the frequency of this syndrome in young girls. It is not inconceivable, however, to believe this factor might be responsible and of considerable importance in explaining some of the behavior problems associated with the adolescents. Among the more common manifestations are headache, emotional instability, irritability, uncontrolled outbursts of temper, mental depression, bloating, and increased thirst and appetite. The body weight may increase two to ten pounds and oliguria may exist. Generalized edema may be prominent. The treatment is simple and usually quite effective. The patient is instructed to limit the daily intake of fluids, take a diet salt free or entirely free of salt, and Diamox® tablets one or two times daily for seven to ten days prior to menses. If cycles are irregular, therapy may not be instituted until the onset of menses. In this latter instance results are not as gratifying. It should be mentioned that the results are almost directly proportional to the degree of symptoms the young child experiences.

General Information

The adolescent is entitled to adequate instruction about the menstrual cycle and its significance. The mother should accept this role but the pediatrician must accept equal responsibility. Keeping a menstrual calendar should be routine with these girls from here on throughout their life time. In general, girls should not alter their mode of living during menstruation. This point bears emphasis. External pads are advised rather than Tampax.® Douching should be discouraged.

The careful attention to the problems of these young girls as well as the educational approach to this period of life on the part of the physician and parents will go far in assuring them a happier healthful life as future wives and mothers.

Conclusions

1. It is important to keep in mind the striking differences between the genitalia of the immature and the adult female.

2. The successful gynecological examination of the young child depends more upon parental cooperation and understanding than any other factor.

3. It is desirable to include the examination of the pelvic organs and breasts at least once each year in girls from the age of eight years through the adolescent period as a part of their general check-up.

4. Proper timing for the correction of malformation and sex aberration is essential. Careful examination at the time of birth should become routine.

5. Vulvovaginitis is by far the most commonly encountered problem in this young female child.

6. Trauma to the genitals during childhood is either accidental, self inflicted, or the result of sexual assault.

7. Pain associated with a bloody vaginal discharge in the young girl strongly suggests a foreign body.

8. Trichomoniasis is rare before menarche. Candida infections are less rare and seem to be seen with increased frequency.

9. Attention was called to the relative frequency of disorders encountered in the young patients in the early years of a gynecologist's practice. This fact serves to emphasize the need for greater emphasis upon the problems and disorders of the young female in our medical curriculum, and that no physician, pediatrician, or gynecologist is adequately prepared if he is not familiar with the common variety of disorders encountered and the problems of handling these young patients.

10. The anovulatory cycles of the adolescent explain the characteristics of this age group.

(a) Low incidence of primary dysmenorrhea.

(b) Relative sterility in the young adolescents.

(c) Hyperplasia of the endometrium and excessive uterine bleeding are not uncommon.

11. The psychogenic role in dysmenorrhea is explained and the need for emphasis on educational and general measures rather than on drug medication, hypodermic syringe, and surgery in its therapy.

12. Premenstrual tension may well account for the behavioral problems in the young girl. Its recognition and treatment is therefore of increased importance.

13. Knowledge of the menstrual cycle and its significance is primarily the responsibility of the mother. The pediatrician or family physician should not shirk his role in this developmental stage.

3451 Peachtree Rd.

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ANESTHESIA IN UNCOMPLICATED AND COMPLICATED OBSTETRICS

Robert N. Reynolds, M.D., *Boston, Massachusetts*

The agent which is used and the technique employed are of far less importance than the care with which the anesthetic is administered.

CO-OPERATION BETWEEN the obstetrician and the anesthetist is an important factor favoring successful obstetric anesthesia. The obstetrician is in a position to assess the patient's condition and, if necessary, direct a therapeutic regimen throughout the entire prenatal course. The psychological approach is also of great value and the patient's apprehension and fear of pain can be dispelled prior to labor.

The initial preparation starts with informing the patient to avoid ingestion of any food at the onset of labor. One of the great hazards is the full stomach associated with emesis and aspiration of gastric contents during induction of anesthesia.

The type of premedication and anesthesia should be selected for each patient according to her general medical, obstetrical, and psychological background. Childbirth pains are not the cause of maternal or infant mortality, but inept efforts to alleviate these pains have often resulted in disaster. For example, some obstetricians prescribe too much medication to make childbirth completely painless. The overdose of hypnotic and sedative drugs cause respiratory and circulatory depression in the mother and infant.

Management of Labor Pains

The pains of labor may be relieved either by analgesic and hypnotic drugs, intermittent inhalation analgesia, regional anesthesia, or by suggestion and hypnosis.

Demerol®, Nembutal® or Seconal®, and Scopolamine® are the most frequently used drugs for re-

lief of labor pains in this country because of simplicity in administration. A complication of the early administration of these drugs in the course of labor is the delay and prolongation of labor. On the other hand, a complication of late medication is that the infant may be born at the time of peak respiratory depressive action of the drugs, as for example, when the drugs are administered at the time of delivery. No drug should be given until the cervix is 3 cm to 4 cm. dilated (5 cm. in primiparas), and pains are occurring every three minutes lasting at least 40 seconds. Nembutal® (75 to 150 mg.) at this time may be given followed by Demerol® (50 to 75 mg.) and Scopolamine® (0.3 to 0.4 mg.) every three to four hours. However, potent analgesics and hypnotic drugs with the exception of nisentil (30 to 60 mg.) should not be administered within three hours of expected delivery. The use of opiate antagonists such as n-allyl-normorphine is reserved for reversing the depressant effects of inadvertent overdosage of opiates. The drug is injected into either the mother before birth or the infant after birth. The opiate antagonists should be given only when respiratory depression is caused by morphine, Demerol®, or other narcotics. Respiratory and circulatory depression resulting from barbiturate or anesthetic agents are enhanced with the use of these antagonists.³

Chlorpromazine (12.5 mg.) may be given approximately every three hours during labor. When the dose is increased to 25 mg. every three hours, tachycardia and hypotension occur frequently. The dosage of the analgesic and hypnotic drugs should be decreased by one-half when used with chlorpro-

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mazine. The potentiating effect of chlorpromazine provides relief for the mother which is equal to or better than that provided by the full dose of the analgesic and hypnotic drugs.

The administration of nitrous oxide plus 50 to 60 per cent oxygen during uterine contractions is an effective and safe method of providing intermittent analgesia. Nitrous oxide is quickly eliminated via the respiratory tract and it has little residual effect upon the mother or fetus. The inhalation of nitrous oxide and oxygen is administered when the patient is aware of the contractions and before they become painful. Several inhalations of the gaseous mixture take place before the pains occur. This permits peak analgesic effect to occur at the height of the contraction. There is less time between the onset of uterine contractions and the onset of pain in the late course of labor. Therefore, it is more effective to anticipate the time of the contractions and administer the nitrous oxide and oxygen accordingly.

Trichlorethylene, another inhalation drug, provides effective analgesia and is probably a more potent analgesic than nitrous oxide. Trichlorethylene, however, is not as innocuous as nitrous oxide and has a cumulative action. The patient is gradually anesthetized when it is given intermittently over a period of time. It is incompatible with the use of carbon dioxide absorbants (even during subsequent anesthesia of another type for delivery) because the alkali and the heat of the absorption reaction cause neurotoxic decomposition products. Tachypnea and cardiac arrhythmia frequently occur with high concentrations.

Regional block analgesia is one of the most effective methods of alleviating labor pains. Low levels of spinal, lumbar epidural, or caudal anesthesia can relieve the patient entirely of pain without depressing the motor functions of the uterus required for labor. This occurs because the sensory innervation of the uterus arises from a lower level in the spinal cord (T_{11} - T_{12}) than the motor innervation (T_5 - T_{10}). The presence of a physician during labor is manda-

tory when these methods are employed. Because of this factor, these methods are not widely used. Regional techniques should be instituted only when the cervix is dilated 3 to 5 cm. and uterine contractions occur at three minute intervals lasting 40 or more seconds. The most frequent complications of these methods are hypotension from inadvertent high levels and infection at site of insertion of block.

Hypnosis and suggestion are rarely used as a sole form of management of pain in labor because they are time consuming and many patients are not amenable to this form of therapy.

Anesthesia for Delivery

Any one or combination of the various anesthetic agents and techniques may be used for normal vaginal delivery. The most important consideration is the skill and experience of the anesthetist. A thorough knowledge of respiratory and circulatory physiology and of the physiology of pregnancy and labor is a prerequisite and is more important than the selection of an agent and technique. It is necessary that the anesthetist understand the pharmacological effects of the anesthetic drugs on the mother and fetus. The anesthetist should observe and record the blood pressure, pulse rate, respiratory rate, and fetal heart rate throughout the entire delivery to serve as a guide for the proper administration of anesthesia. The anesthetist should also be capable of treating any of the following complications: respiratory tract obstruction, laryngospasm, bronchospasm, emesis, hypoventilation, hypotension, arrhythmias, fetal bradycardia, and cardiac arrest. He should prevent retention of carbon dioxide when respirations are depressed or when the absorption canisters are deficient and provide adequate oxygenation at all times.

Maternal and fetal hypoxia is the major cause of asphyxia neonatorum and fetal central nervous system damage. Hypotension during spinal anesthesia decreases blood flow to the uterus and may cause fetal anoxia. Therefore, immediate treatment

ABOUT THE AUTHOR



Born in Troy, N.Y., Dr. Reynolds studied at Yale University and received his medical degree from Albany Medical College in 1946. He did his internship at Albany Hospital in New York following which he served two years in the U.S. Navy.

Dr. Reynolds was assistant anesthetist at the New England Center Hospital and Instructor in Anesthesia at Tufts. He is now anesthetist of the New England Center Hospital, Assistant Professor of Anesthesia at Tufts, and a diplomate of the American Board of Anesthesia.

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is imperative. Bradycardia due to anesthetic or obstetric causes is the most indicative sign of fetal anoxia. The patient should be given 100 per cent oxygen whenever bradycardia occurs. If fetal bradycardia occurs during deliveries without anesthesia or under local or regional anesthesia, maternal oxygenation is imperative. If maternal respiration is depressed, it may be necessary to administer 100 per cent oxygen by the method of assisted or controlled respiration.

The Full Stomach

The stomach is presumed to be full if any solid food has been eaten within five or six hours before the onset of labor. Under these circumstances chlorpromazine or other anti-emetic medication does not prevent emesis and inhalation anesthesia should be avoided. In instances where regional anesthesia is contra-indicated, a relatively safe method is the rapid induction of anesthesia by means of small doses of pentothal and succinylcholine. This technique facilitates a rapid insertion of a cuffed endotracheal tube, maintenance of light inhalation anesthesia, and eliminates the danger of aspiration of vomitus. Some anesthetists prefer to induce vomiting to empty the stomach. One effective method is the parenteral administration of one mg. of apomorphine.

A low level of spinal anesthesia is considered the method of choice whenever the medication for labor has been heavy or when an opiate has been given within two hours of delivery. A recent report shows that the infant cries sooner and has less respiratory depression with the use of regional anesthesia.¹ The infants cry and breathe readily when the medication has been light or when inhalation analgesia has been used for labor pains or when the level of inhalation anesthesia for delivery is not deep.

A few important details related to the management of anesthesia will be mentioned. A complete technical account is described in the literature.^{4, 5} The dosage of 4 to 5 mg. of pontocaine or 40 to 50 mg. of procaine is recommended for low spinal anesthesia. If hypotension occurs, a vasopressor (5 to 10 mg. of methoxamine or methedrine intravenously or intramuscularly) should be given intravenously. Inhalation of oxygen should be administered until the blood pressure returns to the normal level. Occasionally the hypotension will persist following this therapy and is corrected by turning the patient on her side. When this occurs, the patient should be delivered in the lateral position. Presumably, the effect of the pressure of the enlarged uterus on the vena cava when the patient is in the lithotomy position, impairs the venous return to the heart.

This mechanical effect causes a lowering of the cardiac output and blood pressure.

Light (first plane) inhalation anesthesia or analgesia with either nitrous oxide and oxygen or nitrous oxide and ether or cyclopropane provides excellent pain relief for routine vaginal delivery. The anesthetist must be constantly alert to avoid levels of deep anesthesia when using cyclopropane, a rapidly acting potent agent. This agent can cause respiratory depression even during light levels of anesthesia and therefore the anesthetist should be capable of assisting or controlling respirations. Since inhalation agents are the most controllable of all anesthetic drugs, a patient can be readily anesthetized to any desired level. Whenever a particular level of anesthesia is undesirable or whenever adverse effects occur, the anesthetic agent can be quickly eliminated because they are retrievable and depend only upon the function of the lungs for their excretion. Several respiratory efforts (spontaneous or aided) are frequently effective in treating the newborn depressed by deep levels of anesthesia. The short acting barbiturates and the relaxants have little place in routine vaginal delivery except as previously mentioned. However, muscle relaxants with light levels of anesthesia and controlled respirations have been used successfully with caesarean section.²

Anesthesia for Toxemic Patients

The anesthetic problems associated with toxemia during pregnancy are as follows: hypertension, impaired renal function, convulsions, coma, disorientation, cerebral edema, pulmonary edema, and fluid and electrolyte disturbances. Continuous caudal anesthesia is one method advocated for the control of hypertension prior to and during labor and delivery. Spinal and epidural techniques paralyze the sympathetic outflow tract and may cause precipitous falls in blood pressure, particularly in the hypertensive patient. When this occurs, the administration of vasopressors are often necessary to support the blood pressure.

Frequently, magnesium sulfate, an anti-convulsant drug, is prescribed for these patients. The combination of this drug with regional or inhalation anesthesia can also cause severe fall in blood pressure. It is important that the anesthetist administer anesthesia with caution in patients who are depressed with any anti-convulsant or anti-hypertensive drugs. Under these circumstances local anesthesia is recommended and can be considered as the safest method. Inhalation anesthesia in light levels is often considered to be the better and safer choice for the toxemic patient who is irrational and uncooperative, and particularly for patients who may have convulsions. Although pentothal anesthesia is recommended by

some anesthetists because of its anti-convulsant action, small doses of the drug should be given cautiously to avoid maternal hypotension and fetal depression.

Anesthesia for Patients with Heart Disease

Rheumatic heart disease is the most frequently encountered type of heart disease in pregnant women. The patient's cardiac condition must be watched closely throughout the entire pregnancy. Cardiac decompensation should be treated with digitalization, and in patients with auricular fibrillation it is important to slow the ventricular rate. Continuous caudal analgesia is recommended for labor and delivery in patients with mitral stenosis and pulmonary hypertension. This method provides complete freedom from pain without incurring any straining or voluntary expulsive efforts. Spontaneous uterine contractions will expel the fetus to a point where outlet forceps can complete the delivery. This method is advantageous because it eliminates the additional strain of active labor on the heart. Cardiac decompensation can occur in patients with advanced mitral stenosis when pain, fatigue, and emotional strain of labor produce tachycardia. It is for this reason that local anesthesia is not recommended. Well managed inhalation anesthesia also can be given with a high degree of safety. Only one dose of scopolamine should be administered one-half to three quarters of an hour before delivery because a high dosage of scopolamine may cause tachycardia and lower the cardiac output.

Anesthesia for Hemorrhagic Complications

Cyclopropane anesthesia is generally recognized as one of the safest agents for patients who are bleeding. The blood pressure is less frequently depressed during light cyclopropane anesthesia than with all other forms of anesthesia. Spinal, caudal, and epidural anesthesia are contra-indicated under these circumstances because of their effect upon the circulation. Patients with placenta praevia or abruptio placentae usually are not in shock at the time anesthesia is needed. These patients usually have bled slowly and are in a state of compensation although they are anemic and have a lowered blood volume. Whenever surgery is immediately necessary in a patient in shock, particularly before blood transfusion can be instilled, either 100 per cent oxygen alone or with local anesthesia is all that is needed for either vaginal delivery or caesarean section. Whole blood transfusions must be given quickly and as soon as possible. In the event blood is not readily available, plasma and volume expanders should be given to support the patient until transfusion therapy is started. When hemorrhage is caused by hypofibrinogenemia, fibrinogen should be administered.

When fetal bradycardia occurs, indicating fetal distress, no anesthetic agent which passes through the placental barrier should be used because the drug would potentiate the hypoxic depression. Only oxygen should be administered at that time to the mother.

Anesthesia for Patients Requiring Uterine Relaxation

Cyclopropane or ether anesthesia can relax Bandl's contraction ring and tetanic contraction of the uterus and also can facilitate version and extraction procedures. Epidural, spinal anesthesia, and muscle relaxants do not affect the smooth muscle of the uterus and do not relax the uterine musculature.

Anesthesia for Premature Delivery

Anesthesia must be managed carefully in patients who are to give birth to a premature infant. The respiratory center of the premature infant is not completely developed and even small doses of depressant drugs which cross the placental barrier may cause severe respiratory depression. The potent anesthetic agents, analgesics, and sedatives should be avoided. Inhalation analgesia may be used only for the relief of labor pains. Regional techniques for labor or delivery are probably safer for the premature infant.

Anesthesia for Patients with Diabetes

Caesarean section is frequently done before term in patients with diabetes mellitus. Regional anesthesia is usually the method of choice because of the prematurity of the infant. If pregnancy has advanced to term, vaginal delivery may be managed by regional or inhalation techniques depending upon the condition of both the mother and the fetus. Long-acting insulin should be stopped 24 hours before operation, and postoperatively regular insulin is given according to the urine tests until the patient is stabilized. These patients should receive intravenously ten percent dextrose before and after operation.

Anesthesia for Patients with Hypertension

Patients with hypertension who have received anti-hypertensive drugs require careful management to avoid hypotension during anesthesia. Inhalation anesthesia, low spinal, caudal, and local anesthesia are suitable.

Pregnancy may occur in patients with various diseases, such as myasthenia gravis, multiple sclerosis, leukemia, and Hodgkins disease. The selection of anesthesia should be made on the basis of the maternal and fetal condition. If the fetus is in poor condition or premature, local anesthesia is best. Anesthesia for delivery of patients with pulmonary

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tuberculosis presents no special problem. Inhalation or regional techniques may be used.

Summary

Anesthetic management of uncomplicated and complicated obstetrical patients has been reviewed briefly. No one form of anesthesia is best in all cases. The care and manner in which anesthesia is administered is far more important than the choice of agent and technique .

171 Harrison Avenue

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MORE OLDER AGED NOW PROTECTED BY INSURANCE

THE NUMBER OF older aged persons with health insurance is growing at a much faster rate than the senior citizen population itself, according to a newly published survey by the Federal Government.

The Health Insurance Institute, citing a June, 1958 study of the U. S. Department of Health, Education, and Welfare, reported today that a greater percentage than ever before of the older population is now protected by voluntary health insurance plans.

The senior citizen population is increasing at a rapid rate. Today there are nearly 15 million Americans who are 65 years of age or over. This figure is expected to rise to 21 million persons by 1975.

The government study shows that the number of Americans 65 and over increased by 13 per cent from March, 1952 to September, 1956, while the number of senior citizens covered by health insurance went up 56 per cent. These figures do not include persons in institutions, such as homes for indigent care.

The growth trend held true over the 1952-1956 span for each age bracket among older persons. Thus, the number of persons in the 59-69 age bracket increased by seven per cent while the number of insured grew by 40 per cent. In the 70-74 age class, the total population went up 15 per cent and the insured increased 68 per cent. The number of persons 15 years old and over climbed 18 per cent while the insured portion of that age group rose by 87 per cent.

The government study also pointed out that 26 per cent of the population in their senior years, or one out of every four persons 65 and older, had health insurance in March, 1952. By September,

1956 this proportion had climbed to better than one out of every three, or 37 per cent.

In recent months, top U. S. medical and insurance spokesmen have drawn attention to the need for more adequate health insurance coverage for senior citizens.

F. J. L. Blasingame, M.D., General Manager of the American Medical Association, said last May that financing health care for our older age population was the major problem which voluntary health insurance and medicine must solve jointly.

Morton D. Miller, Chairman of the Health Insurance Council, a federation of insurance associations, last August stated that "the extension of coverage for our senior citizens" was one of two major problems facing health insurance. He listed rising medical costs as the other.

Health insurance, the Institute reports, is being extended to more and more older persons in a variety of ways.

One method is by permitting workers to continue their insurance under group policies (usually available through the place of employment or union sponsorship) after retirement, or to convert their group coverage to an individual policy. Another is the issuance of new insurance to groups of older persons and to individuals at advanced ages.

Still another is a type of health insurance that becomes fully paid up for life at the age of 65, thus enabling the policyholder to pay for his protection during his younger, more productive years.

The Health Insurance Institute is the central source of information for the nation's insurance companies serving the public through voluntary health insurance.

MEDICAL GRAND ROUNDS:

THE NEPHROTIC SYNDROME

Staff of the Medical College of Georgia, *Augusta*

DR. KIMMERLING (Medicine): Today we are going to discuss the nephrotic syndrome. Dr. Findley will moderate the panel.

Dr. Findley (Medicine): Today's discussion is going to center around a condition which some people call *genuine* or *lipoid nephrosis*, a term used to describe patients with too much protein in the urine and not enough in the blood, and who also usually, but not always, have edema and hypercholesterolemia but normal or nearly normal renal function and blood pressure. It is better, however, to use the term as an adjective rather than as a noun since there are many diseases which may be accompanied by this combination of abnormalities. We will therefore refer to it as the *nephrotic syndrome* rather than *nephrosis* for, like fever or jaundice or cyanosis, it may have many causes. There is hardly a time when we on Medicine (and we have a small service) do not have several patients with this disorder. I do not know how many there are on Pediatrics but the syndrome is even more common in childhood than it is among adults, so it is almost an everyday problem in hospital practice. Three of our patients have been good enough to come down here this morning. I am afraid we have rather spoiled Mr. McEntyre's vacation because we have asked him to work these patients up and present them to us; he has been very conscientious about it and will now give their histories very briefly.

Mr. McEntyre (Student): The patient on my extreme right is MR. H. M., a 22 year old white male admitted March 4, 1958 with the chief complaint of nephrosis. Eight months previously he had chills and fever for which he consulted a physician who told him that he had albuminuria, red blood cells in his urine, and no hypertension. One month later

he became edematous and remained so except for one remission two months ago following which the edema gradually returned. He denies oliguria or gross hematuria. He has some exertional dyspnea.

The second patient on my right is MR. P. M., a 31 year old colored male admitted January 6, 1958 with the chief complaint of swollen feet and bad eyes. His vision has been impaired for over two years and he has occasional frontal headaches. His eyelids have been swollen and he has had lower extremity edema for several months. He has been a known diabetic since the age of 14 years.

The other patient is MR. W. A., a 14 year old colored boy admitted February 7, 1958 with the chief complaint of swelling which was preceded by a head cold and sore throat. He was apparently in good health up until three years ago when he experienced a severe sore throat immediately followed by facial and lower extremity edema. He has had five or six episodes of swelling since the initial episode—each subsiding within two or three days with bed rest and oral penicillin. He has had some shortness of breath on exertion for the past two years. He denies hematuria, joint pain, or blurring vision.

We have one other patient who is not present. MR. L. C. V., a 57 year old white man admitted January 4, 1958 with the chief complaint of weakness which had become progressively worse since contracting the "flu" at Christmas time, 1957. On December 27th he experienced a sudden transient pain in his right flank which was followed by three days of oliguria with thick, cloudy, brownish-yellow urine. Onset of generalized swelling was concurrent with the oliguria. He has had some shortness of breath since his present illness.

Dr. Findley: It's an extraordinarily interesting thing, I think, that an organism should suddenly find it necessary to enlarge itself with brine, and I would like to develop the theme later on that per-

MEDICAL GRAND ROUNDS / Continued

haps this edema may actually serve a useful purpose. In any event, all of these patients give histories which are essentially similar. It is that of a silent, insidious onset of edema and none of them, you will observe, give a story characteristic of acute hemorrhagic glomerulonephritis; namely, a streptococcal infection, a short period of recovery, then the abrupt appearance of hematuria, hypertension, and edema. Such a history is conspicuously absent in any of these four patients. In any large group of individuals with the nephrotic syndrome, however, there are certain background features which are worth mentioning.

Perhaps 25 per cent of them give vague histories suggesting allergy and, indeed, sometimes the nephrotic syndrome appears while they are being desensitized to one offending antigen or another. Some of them give histories suggesting infection of one sort or another and in the days when secondary lues was much more common than it is now, hypoproteinemic edema and proteinuria were not uncommon features of the secondary stage. It has been encountered also in quartan malaria which is interesting because in certain pediatric centers the nephrotic syndrome is treated with malaria if it proves to be resistant to other measures. Many patients give a vague history suggesting a vital infection at the onset, and one of these four patients had an influenza-like syndrome shortly before the onset of edema. Others have been exposed to chemicals of one kind or another; heavy metals, particularly bismuth and gold, are sometimes incriminated. Epileptics have developed the nephrotic syndrome following anti-convulsive medication, although I think some of the offending drugs have been withdrawn from the market so this is not as important a problem as it used to be.

In a way, I suppose the nephrotic syndrome may also be regarded as an occupational hazard among those who like to go on picnics because it has followed exposure to poison-oak and bee stings. In the absence of any offending external agent like these, it has been described as part and parcel of a number of diseases. Diabetes mellitus is a very common cause of it and we have one example here today. Disseminated lupus erythematosus is another disease that should always be thought of in dealing with the nephrotic syndrome in females. Amyloidosis either primary or secondary is not an uncommon cause as is bilateral renal vein thrombosis. It occurs in constrictive pericarditis and in toxemia of pregnancy. So there is a very large assortment of lesions which seem somehow to be responsible for this curious syndrome. For example, one of our patients has long-standing diabetes mellitus; another

apparently had a respiratory infection prior to the onset; the other two give essentially negative histories. It is important to note from the standpoint of pathogenesis that when the swelling came on, all of these people were eating well and had nothing in their histories to suggest disease of the liver which might impair its ability to manufacture plasma proteins.

Now Mr. McEntyre, was there anything in common found on physical examination?

Mr. McEntyre: MR. M. on admission was described as being a well-developed, well-nourished white man and in no apparent distress. He was afebrile. The blood pressure was 140/82. His weight was 75 kg. while his usual weight was 65.5 kg. The fundi was normal. He had a grade I systolic aortic murmur but no cardiomegaly. His lungs were clear. There was some ascites. His penis and scrotum were edematous and he had 4+ pitting pretibial edema bilaterally.

P. M. on admission was in no apparent distress. He was afebrile. His blood pressure was 180/110. His weight was 70 kg., his usual weight being 64 kg. His fundi showed extensive arteriolar constriction, old exudates, microaneurysms, and scarring due to old retinal hemorrhages. He had moderate cardiomegaly, a grade II systolic aortic murmur, and also a soft systolic murmur at the apex. His lungs were clear. His eyelids were edematous and he had 2+ pitting pretibial ankle edema bilaterally.

W. A. was described as being a well-developed, well-nourished colored boy in no obvious discomfort. He had no gross edema. His weight was 53.5 kg., his usual weight being 50 kg. He was afebrile. His blood pressure was 170/128. The fundi showed generalized narrowing of the arterioles. There was no cardiomegaly but he had a systolic thrust at the apex and a grade II systolic aortic murmur. His lungs were clear.

The absent patient, MR. L. C. V., also had no complaints except those due to edema. He was afebrile and his blood pressure was 180/100. His weight was 73.5 kg., the usual weight being 63.5 kg. He had generalized pallor of mucous membranes, his fundi showed arterio-venous crossing defects, he had slight cardiomegaly with a grade III harsh systolic aortic murmur and a grade II soft blowing systolic pulmonic murmur. He had dry rales in the base of both lungs. His abdomen was lightly distended and flank dullness was present. His liver was palpable 4 cm. below the costal margin in the mid-clavicular line. His scrotum was edematous and he had a trace of pedal edema bilaterally.

Dr. Findley: Aside from the gross edema which largely subsided under treatment, the general physical examinations were not very helpful. Three out

of the four patients have elevated blood pressures and one has the severe retinopathy of diabetes. One of them has normal blood pressure, however, so it is obvious that there is no correlation between the nephrotic syndrome and the level of arterial blood pressure. Indeed, I think it would be more common to have the nephrotic syndrome in people with normal tension rather than hypertension. What about the laboratory work, Mr. McEntyre? Can you summarize that briefly?

Mr. McEntyre: I have the pertinent admission laboratory data—(Table I).

As you can see in Table I each of the four patients has marked proteinuria and hypoalbuminemia. The gamma globulin fraction is elevated in the serum of all of these patients as is the cholesterol content in all except L. C. V. All but H. M. were azotemic.

Dr. Findley: Will you comment upon their body weights?

Mr. McEntyre: All the patients weighed considerably more than they usually did with the exception of W. A. who had gained only 3.5 kgs. Their blood pressures were all elevated except MR. H. M. who was normotensive.

Dr. Findley: We have commented upon the fact that this syndrome bears no relationship to hypertension. This table shows that neither does it bear any relationship to the degree of renal insufficiency. Three of these patients have chronic azotemia and the fourth one does not.

Now for about 300 years doctors have been diagnosing kidney disease by boiling urine acidified with vinegar. More refined procedures show that the electrophoretic patterns of serum and of urine are really mirror images of one another; that is to say, if a protein fraction is scarce in the serum, it is apt to be plentiful in the urine and vice versa. No albumin, of course, is a very small molecule; it is more readily filtrable than any of the other serum proteins and if one assumes that glomerular filtrate contains about as much protein as spinal fluid does, for example, then the usual daily volume of 180 liters of glomerular filtrate will contain perhaps as much as 20 gms. of serum albumin. Now the proteinuria which is so evident here could be due either to failure of the

renal tubules to resorb this filtered protein—and this could account for a very heavy proteinuria indeed, heavier than any of these patients exhibit—or to increased permeability of Bowman's membrane, and I think the bulk of evidence suggests the latter.

Pathologists have been troubled for many years over the fact that in many of these nephrotics no glomerular lesions were visible. It was not until the introduction of electron microscopy that consistent lesions in nephrosis have been uncovered; these consist of swelling and smudging of the *podocytes*, small cells whose foot-like processes cling to the basement membrane surrounding the glomerular capillaries and thereby somehow modify the permeability of Bowman's membrane. The cause of these changes is unknown but an antigen-antibody reaction has been suggested for several reasons. For example, the standard way to produce this disease in animals is with anti-kidney serum and Dr. Cleon Johnson has spent a great deal of time lately grinding up dog's kidneys, injecting the emulsion into normal rabbits, then bleeding the rabbits and reinjecting this rabbit anti-dog kidney serum into other dogs, whereupon changes resembling glomerulonephritis and the nephrotic syndrome promptly appear. Furthermore, Dr. Cecil Krakower at the University of Illinois by separating glomeruli from the rest of the kidney tissue in a high speed centrifuge has been able to show that the glomerulus itself is strongly antigenic. And finally, Mellors and Ortega have detected the antibodies in the glomerular tufts by fluorescent technics. So the disease is classified, at least for the moment, among the abnormal immune mechanisms. From the therapeutic standpoint, it is important to do everything possible to restore the integrity of this glomerular membrane. It is important to abolish the proteinuria if possible, because globulins are thought to be primarily toxic to glomeruli, there being some evidence that chronic globulinuria leads to hyalinization of glomeruli, renal insufficiency, and hypertension. I think if one had to adopt an anatomical or pathological diagnosis for this group of individuals, the term suggested by Bell, so-called "membranous glomerulonephritis", might be most suitable. It refers to thicken-

TABLE I
Laboratory Data

Patient	Weight kg.		Blood Pressure	Urine Protein Gm/24 hrs.	gm % Plasma Protein			Chol. mg %	NPN mg %
	well	sick			Alb.	Glob.			
W.A.	50.0	53.5	170/128	15.5	1.7	2.5	27%	432	121
L.C.V.	63.5	73.5	180/100	11.9	3.2	2.5	45%	164	77
H.M.	65.5	75.0	140/82	25.7	1.7	2.2	22%	478	36
P.M.	64.0	70.0	180/110	24.3	2.2	3.3	27%	404	94

ing of this filtering structure. From the clinical standpoint, I think there is only one constant feature and that is heavy proteinuria. Usually the patients have edema; usually, they have hypoalbuminemia; they may have hypertension and renal insufficiency but these are not constant and proteinuria is. There is some feeling that consistent proteinuria in excess of perhaps 3 or 4 gms./day is sufficient grounds to make a diagnosis of the nephrotic syndrome, whether the individual has edema or not. Another useful clinical aphorism is, I think, that chronic pyelonephritis and nephrosclerosis are never the primary cause of the syndrome. It is true that many individuals with the nephrotic syndrome may have secondary infections of the kidneys and may, if they have hypertension, develop vascular changes but there is no real correlation between the two.

As for hypoalbuminemia, which again is inconsistent but usually exists, there are three possible explanations. The body may fail to manufacture plasma proteins satisfactorily but all of these patients were eating properly at the onset and they had no evident liver disease; the few metabolic studies with which I am familiar have shown that, if anything, the liver in this situation manufactures plasma proteins at an abnormally high rate. The second possible explanation is that the long continued proteinuria accounts for the depletion of serum proteins, and there is no doubt that this is a contributing factor. But many severe nephrotics with markedly reduced serum albumin have a very modest proteinuria, 3-5 gms./day, which hardly seems sufficient to account for the extreme degree of protein starvation which many of these patients exhibit. So I think there is again a growing suspicion that perhaps protein is being catabolized or broken down at an excessive rate somewhere in the body. This could be in the kidney. Certainly, there is another group of individuals who have idiopathic hypoalbuminemia; they have hypoalbuminemia, they are edematous but they do not have proteinuria and they have no liver disease. In the few isotopic studies of those individuals that I am familiar with, there has been evidence of increased protein break-down. For reasons that we do not have time to go into today, we suspect that the diseased kidney may break protein down as well as excrete it. In any event, after these nephrotic individuals diurese, a striking degree of emaciation is evident. The syndrome under discussion is fundamentally a condition of protein starvation.

The hypercholesterolemia is not well explained. Lipids, of course, cannot dissolve in serum or water unless they are conjugated with protein molecules

so it may be that the accumulation of lipids is just due to a kind of traffic jam. The protein part of these molecules is disposed of so rapidly that the lipid part remains behind because its disposal cannot keep up with that of protein. In any event, it is a secondary manifestation to the hypoalbuminemia. Edema, which may or may not be present, we think is probably a beneficial compensatory phenomenon. Indeed, in severe cases it may be the only thing which keeps the patient alive. The kidney retains sodium excessively under two main circumstances: first, when the cardiac output is inadequate which is not the case in this situation or, secondly, when the blood volume becomes inadequate as we think is the situation here. The blood volume becomes inadequate because of the hypoproteinemia and the return of salt solution to the blood stream by the kidney is a compensatory effort to maintain something resembling a normal plasma volume. I think you can see that a sharply reduced *number* of plasma protein molecules can be kept at the usual *concentration* only by a reduction in plasma volume which might not sustain life. So we look upon hypoalbuminemia and edema as essentially useful homeostatic responses but they do not solve the problem of protein depletion.

Now the correlation with hypertension and uremia, as I have said, is extremely poor. Those of us who deal with adults are quite pessimistic, feeling that malignant hypertension often supervenes within five years after the onset of the syndrome. In general, pediatricians are more optimistic than we are and Dr. Vaughan will comment on the outlook in childhood. As to treatment, I am going to turn that over to Dr. Vaughan also, for he knows much more about it than I do. It is much more commonly a childhood problem than it is in adults and the situation may be different. First, however, I am going to ask Mr. McEntyre if he will not comment upon three methods that we have employed in handling these patients. One is the response to diuretics. It is always fun to see a person lose a lot of water and I would like to raise the question as to whether it is really important or not. Edema is a cosmetic and mechanical problem to the patient and to the family but as I have already stated, it is probably not an essential feature of the syndrome. At the moment, chlorothiazide is the fashionable diuretic. How did these patients respond to this drug, the trade name for which is Diuril®?

Mr. McEntyre: This table on my right shows the response of two patients, MR. L. C. V. and MR. H. M., to Diuril.® Table II shows the average values before and after treatment. The urinary volume almost doubled in both of these patients. The proteinuria stayed about the same. In H. M. the excretion of Na

and Cl increased about three times on treatment but the K output was less affected. MR. L. C. V. lost from 75 kg. to 58 kg. in 12 days and MR. H. M. lost 7.5 kg. in six days.

TABLE II
Chlorothiazide (Diuril®) 1.0 gm.
twice daily by mouth

	L.C.V.		H.M.	
	Before	During	Before	During
Urine volume cc/da	1350	2343	1225	2642
Urine protein cc/da	8.45	7.06	21.30	24.26
Urine Na meq./da			60.7	178.7
Urine K meq./da			32.6	56.8
Urine Cl meq./da			45.4	174.2
Weight kg.	75.5	58.0	68.0	60.5
Duration of Rx	12 days		6 days	

Dr. Findley: There is not time to go into the mechanism of these diuretics but I would like to say that Diuril® is probably the most satisfactory orally active preparation yet available. I must point out, however, that MR. L. C. V. was refractory to it even by parenteral administration until he was treated with salt-poor serum albumin. That raises the second category of therapeutic agents we have used in these three cases. What was the response to salt-poor human albumin?

Mr. McEntyre: MR. L. C. V. received 25 gms./day for 12 days, but did not really diurese (Table III). Each ampule output cost the Pharmacy here \$18.70. If the patient bought it retail it would cost about \$40.00/day.

TABLE III
No—poor Albumin
25 gms/day for 12 days

Patient: L.C.V.	Before	During	After
Urine volume cc/day	1,218	1,276	2,255
Urine protein gms/day	2.16	9.49	7.08
Serum Albumin gms%	3.2	2.8	2.8
Serum Globulin gms%	2.5	1.8	2.2
Weight kg.	75.5	75.5	

Dr. Findley: We are not recommending serum albumin as routine treatment for the nephrotic syndrome. This man was refractory to Diuril®, however, until the albumin was given and we have had similar experiences of refractoriness to steroids until the serum albumin had been given. We anticipated that the albumin would appear in the urine just as his own serum albumin has but evidently his capillary systems are relatively impermeable to this molecule for the proteinuria did not increase very markedly. The fact that the serum albumin concentration did not rise either, it would seem to me, is evidence that the material accomplished its purpose. It stayed in the blood stream, it attracted water from extra-cellular fluid, and produced an iso-osmotic expansion of plasma volume with a consequent diminution of anti-diuretic mechanisms. While not in it-

self a potent diuretic, it did make the patient exceedingly sensitive to Diuril® thereafter. I hope Dr. Vaughan will comment on the experience of pediatricians with this material and also with the cheaper substitute for serum albumin such as acacia and dextran. I am under the impression that they have largely gone out of fashion.

The only remedy approaching a specific nature is cortisone or a related compound. Would you tell us what our experience was in this regard, please?

Mr. McEntyre: One of these patients, MR. H. M., received Meticorten® 20 mgm. q.i.d for 12 days. These values are seen in Table IV:

TABLE IV
Meticorten®
20 mgm q.i.d. for 12 days*

Patient: Mr. H.M.	Before	During
Urine volume cc/day	2642	1844
Urine protein gms/day	24.3	21.4
Urine Na meq/day	178.7	32.9
Urine K meq/day	56.8	49.7
Serum Cholesterol mgm%	505	579
Serum Albumin gms%	1.6	2.3
BUN mgm%	8	25

*last 4 days received 500 mgm chlorothiazide b.i.d.

His urinary volume decreased but he had recently taken some chlorothiazide. The urinary proteins decreased only slightly, and the excretion of Na dropped very sharply, that of K less so. The serum cholesterol concentration continued to rise as did his BUN. Serum albumin increased from 1.6 to 2.3 gms. %.

Dr. Findley: The therapeutic target in the nephrotic syndrome has changed in recent years. We used to be quite happy when we induced a diuresis. More lately, I think we have come to realize that there is essentially no reason to feel that a "dry nephrotic", so called, is any better off than a "wet one" except from the mechanical standpoint. With the introduction of steroids our objective has changed from that of the abolition of edema to that of the abolition of proteinuria. I am eager to hear how the Department of Pediatrics reacts to this problem. We are inclined to give doses of steroids which are large enough and to give them over a long enough period until we are convinced that the proteinuria will or will not subside. To date, MR. H. M. has been quite stubborn in his response to the steroid. His proteinuria has not been appreciably modified. His serum protein concentrations have not risen and we are somewhat in a quandary to know when to give up. We have to pay the price of artificially induced Cushing's disease in these individuals and I am not sure that it is worth it.

How do steroids act? I think nobody knows. Do they alter capillary permeability? Well, they seem to in perhaps one-half of the cases, as judged by the

MEDICAL GRAND ROUNDS / Continued

disappearance of proteinuria. There are some who think that they are anti-diuretic by inhibiting the neuro-hypophysis, or that they increase the glomerular filtration rate. It is a very large theoretical field but they offer, I think, the only approach to specific control of the problem, and in those who respond a frequent estimation of urinary protein content is as important as a frequent estimation of urinary glucose is to a diabetic.

Dr. Vaughan, I think you are probably more optimistic about this syndrome than those of us who treat adults. It is a different disease in childhood and how do you feel about these so called remedies?

Dr. Vaughan (Pediatrics): Well, let me start off with a confession of ignorance as to whether nephrosis in children is a different disease from what it is in adults, though there is much to suggest that it is.

Dr. Findley has suggested that pediatricians are optimistic, either because it is a different disease or because they may know something about the treatment of nephrosis in children. Now, I have probed around among my fellow pediatricians as to their feelings about nephrosis or the nephrotic syndrome in children and its therapy and all I have been able to discover is a pretty deeply rooted sense of dissatisfaction. Because of cumulated unhappy experiences with it, efforts to control this process, whatever it is, have followed a number of different directions at various times and will, in all likelihood, continue to do so.

Among the handicaps under which we labor are first of all, the lack of a secure diagnosis. In children, for example, we are inclined to be happy when a diagnosis of lipoid nephrosis in a child without hypertension, hematuria, or azotemia can be supported by renal biopsies. We presume that the changes which are described in the basement membrane, which may be rather unspectacular early in the course of this disease, have some possibility of being reversed in time. It used to be felt that when hypertension, hematuria, or azotemia were present in the nephrotic syndrome, we made a different diagnosis: the degenerative or chronic phase of glomerulonephritis. But this is a lot less certain now than it was. In any case, I would agree there is good reason to surmise that what is generally felt to be chronic glomerulonephritis is not related to acute hemorrhagic glomerulonephritis; this last is clearly related to streptococcal infection.

There are a number of currently active approaches to the problem of nephrosis. Studies of glomerular filtration rates and things of that sort have been felt to be productive in some hands but more to be, I would guess, from a prognostic standpoint than be-

cause they guide therapy. Here, at the Medical College of Georgia, Dr. Nancy Thornton and Dr. Lee Stoddard have studied renal biopsies. Perhaps Dr. Thornton might say whether this has been helpful. It has led to some surprises.

Among the other handicaps under which we labor are the unpredictability of therapeutic results. In children, as in adults, we have failures of primary attempts at therapy as well as relapses following therapy which seems temporarily helpful. On the other hand, it is clear that some children, the exact number of whom is uncertain, appear to have a complete and permanent reversal of the nephrotic syndrome. Too small numbers of children have been studied for sufficient length of time for us to know whether the word "permanent" is properly used in this connection or not.

The trends in therapy among those people who have had considerable experience with this problem suggest that emphasis upon filling the patient up with protein, either through high protein diet or administration of serum albumin has been pretty well abandoned. It is ordinarily suggested that the children should have reduced salt in their diets but a salt-free diet is not suggested; indeed, it is well established that some patients have a salt-losing problem and need very conscientiously to be supported with salt or with a balanced salt mixture in order to avoid acidosis or some other disturbance of water and electrolyte balance.

Therapy in pediatric circles is centered at the present time around ACTH and the adrenal steroids. There are two trends which I think are evident. One is the trend to intensive, early, long-continued therapy in the hope of producing an early and complete reversal of whatever process is going on at the glomerulus. The other tendency is to follow this intensive, long-continued, early treatment (by which we mean intensive therapy for a month or more initially) with long-continued intermittent therapy. Intermittent therapy consists of giving steroids in relatively large doses for three to four days of the week and to have these three to four days of treatment followed by four or three days, as the case may be, of freedom from treatment. It is hoped that this intermittent therapy will avoid in the patient any more-than-tolerable degrees of Cushingoid change or of salt retention.

Emphasis was for a time focused upon edema as an indicator for therapy, but many people share the same unhappy feeling about edema that Dr. Findley has expressed—that the patient may not be really better to be free of edema. The sedimentation rate has been focused upon by another group of workers, Conrad Riley in particular. He has felt that therapy should be continued until the sedimentation

rate is normal and then maintained intermittently in such a way as to keep the sedimentation rate normal. I would guess that most people actively engaged in grappling with this problem at the present time are focusing attention, as Dr. Findley again has suggested, upon proteinuria. It is not true of *any* regimen of therapy that the urine will always become protein-free, but when this does happen, I think every attempt should be made to preserve the urine in a protein-free state, with the fantasy, possibly not justified, that protein-free urine is probably being passed through a reasonably healthy glomerulus. When it is not possible to keep the urine protein-free, we are likely to feel our way along in a hit-and-miss way with this and that, and the treatment of nephrosis becomes an absorbing and sometimes a disappointing problem.

There is one statistical study which I regard as of more than passing interest and that is Riley's, which indicates that the outlook for nephrosis in children is not as good following short-term therapeutic programs governed by the sole indication of edema, as it is where from the very outset of the disease some systematic plan for long-term therapy is made. Riley is not sure just what the plan ought to be but he urges that any planning ought to attempt in some systematic manner to exert control over a long period of time over whatever problem exists at the glomerulus.

Other considerations which, I think, go without saying are that affected children need to be adequately protected from infection; for most children on steroid therapy this means some prophylactic antibiotic. Another consideration is that in a condition which has as uncertain a future as this one, a very considerable emotional element comes to have to be dealt with, in the family as well as in the child; it would be our hope that these children can be kept to as normal a routine as possible which means, I think, going to school if they are reasonably comfortable doing so and engaging as normally as possible in whatever activities are appropriate to their age.

Dr. Findley: Well, I, for one, have a very healthy respect for Cushing's disease and am having a good deal of difficulty deciding how long I am willing to

allow a patient to stay in such a severe state of metabolic abnormality for the sake of a slight reduction in his protein output. We have had enough accidents recently to make me exceedingly cautious about sustained treatment with high doses. At the moment—and I may feel differently tomorrow—I think I am unwilling to keep a patient in a state of artificial Cushing's disease much longer than four to six weeks. It seems to me that by that time one should be able to decide whether it is worthwhile or not from the standpoint of diminished proteinuria. I think that probably far less than half of the patients will exhibit a satisfactory reversal of the proteinuric state.

I think you will observe that on 80 mgs. of Meti-corten® daily, MR. H. M. is not only retaining a lot of sodium, his 24 hr. output dropping from 178 to about 30 meq./day, and he has the moon-face and the uncomfortable feeling that goes along with such high doses. However, he has only been on it some two weeks now and I think that we can afford to try the experiment a little longer, although there has only been a slight rise in the serum albumin and a very questionable decrease in urine protein output.

Are there any questions? Dr. Thornton, have you anything to say about your biopsy experience? How many perfectly normal glomeruli have you detected in children?

Dr. Thornton (Pediatrics): I have one normal biopsy or at least the only anatomical finding was a congestion of the glomeruli.

Dr. Findley: That is all we have. Do you think that the outlook, in general, is better if the biopsy specimen is normal?

Dr. Thornton: I do not. The clinical course of this child, who is on high intermittent steroid therapy, has paralleled those with basement membrane changes.

Dr. Findley: Are you reluctant, Dr. Vaughan, to give steroids in the presence of renal insufficiency? There is some feeling in certain quarters that steroids may actually improve renal function. I am curious to know what your feeling is about it?

Dr. Vaughan: I have no thought on that particular point.

Medical College of Georgia

Medical Association of Georgia 1959 Annual Session

May 17-20, 1959

Augusta, Georgia



Jack Pearce, left, welcomes the Woodburys.

Special Article

ROCHELLE GETS A DOCTOR

DAVID HENRY POER, M.D., *Atlanta*

*Member, Medical Advisory Board,
Sears-Roebuck Foundation*

"... We dedicate these buildings to the skill and wisdom that brings relief and cure, and to the patient research that uncovers fresh resources with which to serve the public health. Grant wisdom and guidance to those whose lives are dedicated to the relief of suffering and disease through the ministry of healing . . ."

WITH THESE WORDS, the people of Rochelle and Wilcox County dedicated the first community medical center in their county at a public ceremony and welcomed the first new doctor in the area since before the war.

The dedication was the culmination of more than four years of hard work, determination, sacrifice, and a large measure of faith on the part of the people of Rochelle. It is a story of county-community-individual cooperation that might well stand as an example for others to follow.

As the minister and people intoned the lines of the dedication service held in Rochelle on October 1, there were many things to be thankful for:

The committees of citizens who worked to raise funds for the building.

The citizens who donated the land for the building.

The young physician—Philip S. Woodbury—and his family for agreeing to locate in Rochelle.

In addition, the Physician Placement Service of the MAG helped contact interested physicians and originally furnished the community the name of Dr. Woodbury as a likely prospect.

The Sears-Roebuck Foundation was instrumental to the project in supplying architectural plans for the modern facility and providing advice to the community and the physician all along the line.

Rochelle's struggle to obtain adequate medical services for their community was a long one. We relate it here in some detail for the benefit of other small Georgia communities that might need the services of a physician.

Wilcox County is located in South Central Georgia 70 miles SSE of Macon. There are five chartered towns in the county—Rochelle (the largest), Abbeville (the county seat), Pineview, Pitts, and Seville. The 1950 census showed a county population of 10,167. It is primarily a farming county raising cotton, peanuts, pecans, and timber. It claims two industries employing between 50 and 100 people—one in Abbeville and one in Rochelle.

Until recently, there were three physicians in ac-



State Health Officer Tom Sellers Speaking at Dedication Services for the Wilcox County Medical Building.

tive practice within the county—all in Abbeville—one is 50 years old, the other, 72.

The largest town, Rochelle with a population of about 1100 and located nearest the center of the county, had no doctor.

Citizens of the county were acutely aware of the need for correction of this situation.

One group after another sought means to alleviate the problem, without success. In 1950 hopes were raised of getting a 25-bed hospital under the Hill-Burton act, but a survey proved unfavorable and their hopes were dashed against the rocks of prohibitive costs.

In 1956 a Wilcox County Health Committee was organized and the committee approached the State Health Department for assistance in construction of some type of minimum health and medical facilities for the county.

The Survey and Planning Section of the Health Department conducted a survey and came up with some recommendations. Among these were that a county health facility be located in Rochelle if land and "other voluntary contributions" could be obtained to assist in the construction.

The people were elated to learn that state and federal funds were available if the county would appropriate \$15,000 and if they themselves could raise an additional \$15,000. The County Commis-

sioners appropriated their \$15,000. So the responsibility again fell squarely back into the laps of the people.

How do you go about raising \$15,000 in a county with a little over 8,500 people (1956 estimate) and an average medium family income of \$935 a year?

Undaunted by the seemingly Herculean task before them, Wilcox County citizens set to work. Hundreds of letters carried the plea for funds to people outside the county. The typing class of the County High School sent out 95 letters to former residents of the county or people who had relatives still living there. The response was encouraging.

One ex-Wilcox County resident wrote: "I am proud to send you \$100 on this most worthy project. My mother and daddy live in Wilcox County; they are old, and the knowledge that medical help will be available when needed for them will be of great assurance to me. I sincerely hope you can raise the money and get a doctor."

School children made posters, wrote essays, and saved their pennies. Organizations—white and colored—sponsored fund-raising activities of every imaginable variety.

The Rochelle Lions Club pledged \$1,000 and raised it by selling tickets on a boat and motor; spraying lawns for pest control, and presenting a "Womanless Wedding" in the school auditorium.

ROCHELLE / Poer

The Priscilla Club pledged another \$1,000—sold shrubbery, and flooded the town with cakes, cookies, pies, and candy for weeks on end.

The D.A.R. Chapter raised \$500 on a county-wide barbecue supper and contributed another \$300 from an unused student loan fund.

A first grade teacher organized a "\$1 Medical Center Club." Each child who contributed a dollar could have his name printed on a big poster in the hall and published in the local weekly newspaper. Over 100 did.

Progress was recorded on a big clock chart running from \$1 to \$15,000. Young and old alike watched with eager interest as the fund grew.

Even before it was certain that the project would ever be completed or that a doctor could be found to come to Rochelle, \$5,000 had been raised.

By July 1, 1957 they had the \$15,000.

The original recommendations by the Health Department had been that a health clinic and doctor's offices be housed under one roof in a facility costing "not less than \$50,000 nor more than \$100,-

000." Then it was learned that there would have to be two buildings.

The people decided to put the money they had raised into the doctor's building and the county, state, and federal funds into a health center. But another \$8,000 was needed to cover the cost of the one building.

Two sites, within a block of each other, were donated. One was given by Mr. and Mrs. Walter Brown and another by Mrs. Carrie D. Laidler who had lost a four-year-old granddaughter from polio.

The additional \$8,000 for the doctor's building was borrowed, to be paid back from rent and interest if and when a doctor arrived.

The Sears-Roebuck Foundation furnished plans for a doctor's building free of charge. Finally, on a bone-chilling day in January, 1958, ground was broken and work commenced. Prison labor from the Wilcox County Work Farm reduced labor costs to a minimum. Several men in town gave almost full time to the purchasing of materials, paying of bills, and general supervision.

Then, a second great problem came into focus

THE STORY OF HOW A SMALL GEORGIA COMMUNITY



CROWD TOURS MEDICAL BUILDING

Following the Dedication Services, several hundred citizens of Rochelle and Wilcox County toured the new Clinic Building built through the efforts of local fund campaign. The office is constructed for use by two physicians. At the present time it is occupied by Philip Woodbury who began practice in Rochelle in September. The building was conceived as "bait" for attracting a young physician to this doctorless community. The efforts of the people of Rochelle serve as a model example of what other small Georgia communities can do to attract doctors to their towns. The entire facility cost approximately \$23,000.

... that of convincing a doctor to come to Rochelle to practice. If the citizens of Rochelle were the least bit confident that their attractive doctor's building would be flooded with applicants for the job, they were soon to meet with grave disappointment.

Many doctors were contacted with the help of the Medical Association of Georgia, the American Medical Association, and the Sears-Roebuck Foundation. Each time a prospect came to look over the situation he was given the "two dollar" tour of the community, dined, entertained, and "wooded" with small town hospitality.

Many came—and as many left.

Finally, in August, a particularly promising young doctor and his wife arrived in Rochelle, Dr. and Mrs. Philip S. Woodbury. The people who met them were impressed and proceeded to give them a special version of the "treatment." They were entertained with steak suppers and a community picnic. The people wanted this doctor to say "yes"—and he did.

On October 1st, the people of Wilcox County dedicated their doctor's building along with the

county-state-federal financed health center. As if they had not already exhausted their energies and finances, they planned big doings—a free chicken barbecue for 500 people, a dedication program to be attended by the Governor and a host of other important people.

Dr. Woodbury is busy now getting his practice started in Rochelle. He has joined the staff of the Crisp County Hospital at Cordele 20 miles away.

A native of North Carolina, Dr. Woodbury says he feels right at home in a small town. He attended Duke University School of Medicine and served a two year general practice residency at Sacramento County Hospital following service in the U. S. Army Medical Corps.

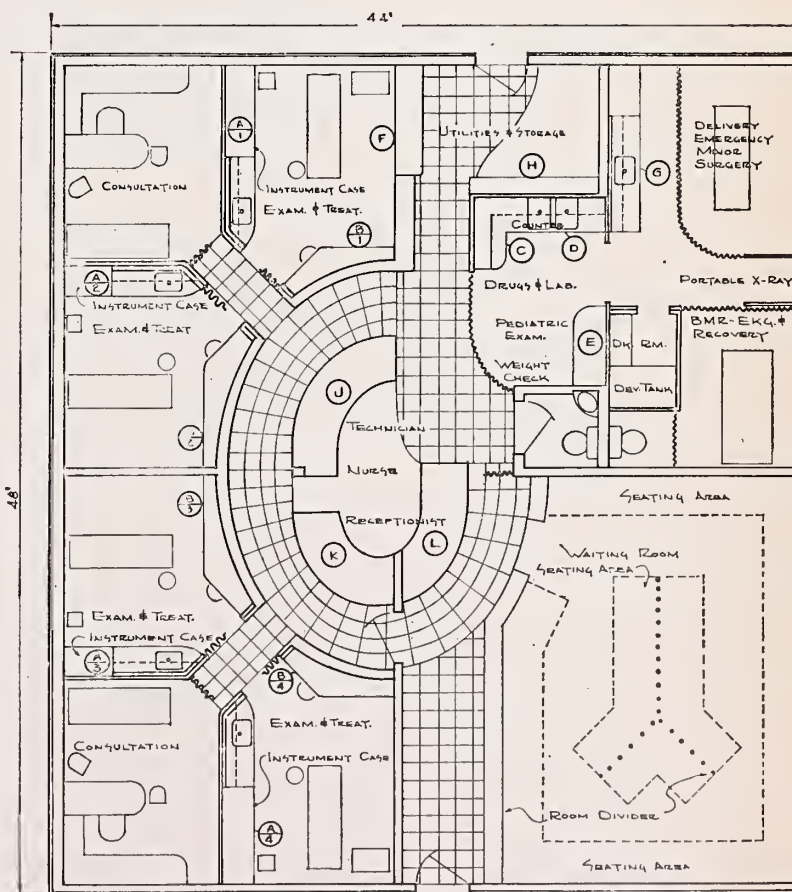
Few physicians have had the welcome mat spread out for them in the way Rochelle citizens have done for Dr. Woodbury. He has a wonderful opportunity ahead of him. As the only active physician in his part of the county, he expects to be very busy and, already plans to look for another young general practitioner to assist him.

1938 Peachtree Road, N.E.

BUILT A MODERN CLINIC TO ATTRACT A DOCTOR

FLOOR PLAN OF ROCHELLE CLINIC

Except for an added waiting room for colored patients, this diagram shows the floor plan for the Rochelle Clinic. Plans for the building were furnished to the community by the Sears Roebuck Foundation. The plans offer a departure from the usual medical center. The long corridor, with its adjoining examination and treatment rooms, laboratory and other rooms, is gone. Instead, this floor plan involves a combination desk and circular corridor to provide an efficient circular patient flow. A planter separates the vestibule from the waiting room. There are also built-in lavatories, toilets, bookcases, and shelves.



The
Achievements

of
Arist

...in Skin Diseases: In a study of 26 patients with severe dermatoses, ARISTOCORT was proved to have potent anti-inflammatory and antipruritic properties, even at a dosage only $\frac{2}{3}$ that of prednisone¹... Striking affinity for skin and tremendous potency in controlling skin disease, including 50 cases of psoriasis, of which over 60% were reported as *markedly improved*²...absence of serious side effects specifically noted.^{1, 2, 3}

...in Rheumatoid Arthritis: Impressive therapeutic effect in most cases of a group of 89 patients⁴... 6 mg. of ARISTOCORT corresponded in effect to 10 mg. of prednisone daily (in addition, gastric ulcer which developed during prednisone therapy in 2 cases disappeared during ARISTOCORT therapy).⁵

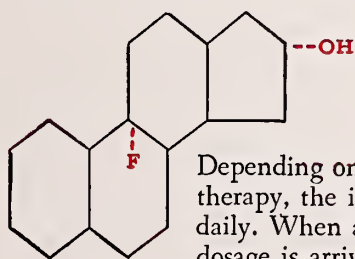
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ARISTOCORT[®]

Triamcinolone LEDERLE

...in Respiratory Allergies: "Good to excellent" results in 29 of 30 patients with chronic intractable bronchial asthma at an average daily dosage of only 7 mg.⁶... Average dosage of 6 mg. daily to control asthma and 2 to 6 mg. to control allergic rhinitis in a group of 42 patients, with an actual reduction of blood pressure in 12 of these.⁷

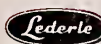
...in Other Conditions: Two failures, 4 partial remissions and 8 cases with complete disappearance of abnormal chemical findings lead to characterization of ARISTOCORT as possibly the most desirable steroid to date in treatment of the nephrotic syndrome.^{8,9}... Prompt decrease in the cyanosis and dyspnea of pulmonary emphysema and fibrosis, with marked improvement in patients refractory to prednisone.^{10,11,12}... Favorable response reported for 25 of 28 cases of disseminated lupus erythematosus.¹³



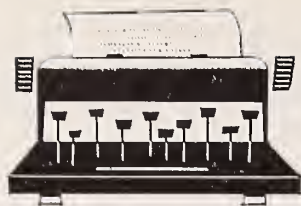
Depending on the acuteness and severity of the disease under therapy, the initial dosage of ARISTOCORT is usually from 8 to 20 mg. daily. When acute manifestations have subsided, maintenance dosage is arrived at gradually, usually by reducing the total daily dosage 2 mg. every 3 days until the smallest dosage has been reached which will suppress symptoms.

Comparative studies of patients changed to ARISTOCORT from prednisone indicate a dosage of ARISTOCORT lower by about $\frac{1}{3}$ in rheumatoid arthritis, by $\frac{1}{3}$ in allergic rhinitis and bronchial asthma, and by $\frac{1}{3}$ to $\frac{1}{2}$ in inflammatory and allergic skin diseases. With ARISTOCORT, no precautions are necessary in regard to dietary restriction of sodium or supplementation with potassium.

ARISTOCORT is available in 2 mg. scored tablets (pink), bottles of 30; and 4 mg. scored tablets (white), bottles of 30 and 100.



LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK



editorials

To Comfort Always

"TO CURE SOMETIMES, to relieve often, to comfort always"; this quotation appears on the statue erected to the honor of Francis Trudeau at Saranac Lake. These few words actually summarize the physician's function in his practice of medicine.

In this age of antibiotics, increasing specialization, and laboratory medicine many of us tend to lose sight of our primary function in the care of patients. Regardless of how specific our diagnostic and therapeutic aids may become, we still must be willing and able to communicate effectively with our patients if we are to function well in the healing of the sick.

Scientific knowledge has become an indispensable tool of the modern physician, and no one can be a good doctor today without competent and adequate scientific training. But more is needed to practice good medicine, which has remained an art while becoming a science. It is today a far-advanced science. But in addition—it has always been and will always be—an art. The secret of healing derives not only from knowledge, but from the human qualities of the healer as well. That physicians of the sixth decade of the twentieth century should have to discover man has a psyche as well as a soma is a travesty on modern medicine. In spite of this apparent "new discovery," many of us still give only lip service to the emotional aspects of the problems of the patient.

There are plenty of capable physicians, the need is for physicians who are nice to people. To some, this art seems to be inherent; to others it has to be a conscious and planned part of their behavior. We

frequently look askance at those members of our profession who have developed the art of being nice to people to such a high degree while allowing their scientific knowledge to deteriorate. These individuals invariably have highly successful practices much to the dismay and chagrin of their more scientifically oriented colleagues. The patients of these physicians are unusually loyal. Because of our disdain for the professional qualifications of this type of physician, many of us swing rather far in the opposite direction. We sometimes erroneously associate the quality of being "too nice" to our patients with professional mediocrity. Nothing could be farther from the truth.

Indeed one gets the impression when talking with an occasional consultant that he dare not be "too nice" to the patient lest his standing as a consultant be questioned. These individuals, fortunately, are rare. The fact remains that in our training in scientific medicine the art of being nice to patients is insufficiently stressed. Without this ability to acquire a mature rapport with our patients our best scientific knowledge cannot be utilized. It seems ironic that as our scientific knowledge is advancing at such a rapid rate our appreciation of the very basic art of medicine is diminishing with alarming rapidity. Are our viewpoints too limited to encompass the whole picture? Let us not miss the boat in our zeal for more scientific understanding of disease and lose the very foundation of medical practice—patient understanding. With this quality, the practice of medicine as we know it can withstand any storm. Without it, patients and doctors alike will have a hard road ahead.

Have You Overlooked This Opportunity?

WE ARE CONTINUOUSLY amazed at the number of our fellow physicians who become disabled. Actually, about one out of seven Georgia physicians are disabled more than a week each year. Let us tell you of five specific cases where the doctor has been disabled for as long as a year.

Three of the cases are disabled by heart disease. Another has been severely disabled by cancer of the parotid gland. The surgery for the malignancy itself has apparently been successful, but complications have set in requiring very extensive plastic surgery. Disability has lasted over a year, and this young doctor is still not able to return to his practice. The fifth doctor in question has cirrhosis of the liver which has lately been complicated by a broken hip.

None of these doctors have reached the age of

normal retirement but, rather, are in the prime of life.

We, more than people in any other profession, see disability strike in all age brackets. And yet, so often we are prone to neglect protecting ourselves against this primary hazard to our security and the security of our families.

The Medical Association of Georgia has tried to be farsighted in sponsoring several insurance programs. In addition to protection against the hazards of disability, the Association is proud to sponsor a group life plan and a catastrophic hospital-nurse plan.

The cost of the coverage provided by these plans is minimal in comparison to the security they provide. Have you overlooked the opportunity of enrolling in these splendid Association programs?

A Job Well Done

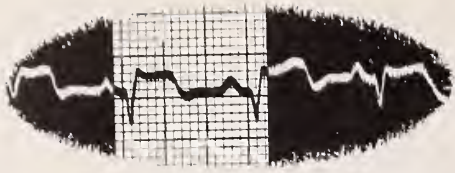
AFTER ALMOST TWO YEARS of service to the Medical Association of Georgia in the capacity as Medicare State Review Board Chairman, Charles S. Jones, Atlanta, has resigned this Chairmanship. With sincere regret Council accepted Dr. Jones' resignation and highly commended him for his activity in this MAG post. Your Association President and Chairman of Council deem it fitting to express the gratitude of the Association to Dr. Jones for his outstanding leadership in the Medicare program.

When Medicare was proposed to your Association and later approved by MAG as contractor and fiscal agent for the Department of Defense, Dr. Jones, at the direction of the Executive Committee of Council, represented the MAG in many conferences held in Washington, D. C. With his broad background as co-chairman of the MAG Insurance and Economics Committee and Industrial Health, Dr. Jones took this thankless, time-consuming Medicare chairmanship and instituted one of the most efficient ad-

ministrations of the program in the country. Devoting at least a day a week to this activity, Dr. Jones was one of the early proponents of the MAG "indemnity-type" Medicare plan. The MAG House of Delegates enthusiastically approved this type plan for Medicare, but as yet the Department of Defense has arbitrarily ignored the MAG position, as presented to them time and again by Dr. Jones.

The Association will soon appoint a new state Medicare Chairman to replace Dr. Jones, but lest we forget be it here recorded that MAG duly appreciates the time and effort of Dr. Charles S. Jones, for his distinguished service to the profession in Georgia as the Medicare Review Board Chairman. To Dr. Jones in behalf of the Officers, Council, and Members of MAG, a "well done" expresses our sentiment.

George R. Dillinger, M.D., Council Chairman
Lee Howard, Sr., M.D., President



heart page

HEMOPTYSIS IN HEART DISEASE

LOUIS K. LEVY, M.D., *Atlanta*

Confronted with this situation, the physician thinks first of rheumatic heart disease with associated mitral stenosis. This is as it should be. Unquestionably, the great majority of instances of this occurrence are in that category. It is most important to realize, however, that hemoptysis is not confined to such a group. Bloody sputum may occur in any form of heart disease which may be complicated by edema or chronic pulmonary congestion. For purposes of discussion, however, mitral stenotic cases represent prime examples, since not only does hemoptysis occur under any of the circumstances mentioned, but also in instances of acute respiratory infection, acute exertion, or any rise in left auricular pressure.

In mitral stenosis several explanations have been advanced for the occurrence of hemoptysis which is not associated with pulmonary edema or pulmonary infarction. The most plausible one, in my opinion, states that there are communications between the pulmonary veins and the bronchial veins. In mitral stenosis the submucosal bronchial veins may dilate greatly and even become grossly visible due to increased pressure in the pulmonary vein surpassing the pressure in the right auricle, causing a reverse flow of blood through the anastomoses with dilation to handle the collateral flow. These veins are apparently beyond the visualization of the bronchoscope. Hemoptysis is probably caused by the rupture or ulceration of these engorged bronchial veins. The hemoptysis resembles massive bleeding from hemorrhoids and esophageal varices which, like the bronchial veins, are submucous shunts between large venous drainage areas. Dilated bronchial

submucosal veins are not present in those cases in which bloody sputum is raised as a result of pulmonary infarction or acute pulmonary edema without accompanying mitral stenosis.

In hemoptysis accompanying rheumatic heart disease the blood-streaked sputum frequently resembles pure blood and may actually exceed 500 cc. The frequency of hemoptysis occurring in patients with mitral stenosis ranges from 10 per cent to 23 per cent of the reported series.

The actual amount of blood coughed up has no prognostic significance since patients with the largest hemorrhages often do best on subsequent follow-up. Rarely does hemoptysis lead to death. If any complication of hemoptysis occurs, it is usually atelectasis.

An interesting feature of hemoptysis occurring in mitral stenosis cases, apart from those of acute pulmonary edema origin, is that considerable pure blood may be coughed up in the absence of much obvious pulmonary congestion.

Special mention should be made of pulmonary embolism occurring in patients with mitral stenosis because of the definite tendency for the formation of mural thrombi within the cavities of the auricles, particularly in the auricular appendages when auricular fibrillation is present. Pulmonary infarction with subsequent bleeding is by no means a necessary sequel of pulmonary embolism, being found in not nearly all cases of recognizable pulmonary embolism.

There are three distinct groups of patients who have hemoptysis with a stenosed mitral valve. These groups are: (1) those with none to slight cardiac enlargement with no congestive failure; (2) those with moderate to great cardiac enlargement without signs of congestive failure; and (3) those with moderate

to great enlargement of the heart with congestive failure. Hemoptysis in group one offers no prognostic significance. In group two hemoptysis in itself does not seem to offer a bad prognostic outlook. In group three the occurrence of hemoptysis increases the likelihood of impending death.

With the status of surgery for the stenotic mitral valve being what it is today, it certainly behooves the physician who sees a patient with this lesion to evaluate the patient in light of being a possible surgical candidate. From the foregoing, one can conclude that *in itself* hemoptysis occurring in a patient

with mitral stenosis does not warrant exposing the patient to valvuloplasty. It most certainly does require that these patients be carefully evaluated and followed quite closely in the future if the decision is made not to operate.

In conclusion, one must remember that any patient who has hemoptysis must be considered as possibly having either tuberculosis or carcinoma. This is true irrespective of the presence of known heart disease. In doubtful cases these conditions must be thoroughly investigated.

ARTICLE REFUTES CLAIMS OF FOOD FADDISTS

AMERICANS ACTUALLY HAVE to go out of their way to avoid being well nourished.

Yet thousands of food supplement salesmen are trying to convince people that improper diet is to blame for most disease and that it can be cured by taking food supplements.

The food supplement business is a multi-million dollar one. It could be considered a "mildly amusing confidence game" except that it is also highly dangerous, according to an article in the current issue of *Today's Health*, an American Medical Association publication.

It is dangerous because persons with serious ailments neglect proper medical treatment in the hope that they can find "a cure in a capsule."

Food supplements are pills, powders, pellets, or capsules that often contain vitamins and minerals, usually in amounts far greater than the body needs, and some "mysterious ingredient" that is usually nothing more than a combination of dehydrated vegetables and plants.

The seven most popular pitches used by the self-styled "nutritional advisers" in selling their supplements are outlined — and refuted — by Joseph N. Bell, Chicago, in the *Today's Health* article. It is part of a campaign being conducted by the A.M.A., the Food and Drug Administration, and the National Better Business Bureau to combat food faddism.

The Seven Most Popular Pitches

—Most disease is due to improper diet. *The fact:* There are a few diseases caused by dietary deficiencies, but they are rarely found in the United States. By patronizing all departments of a grocery store, a person can easily supply all of his nutritional needs.

—Salt depletion causes malnutrition. *The fact:* The composition of the soil has very little effect on the composition of plants grown on it. If certain soil

elements are missing, the plants simply don't grow.

—Chemical fertilizers poison the land and the crops grown on it. *The fact:* Extensive government research has shown that the nutritional value of crops is not significantly affected by the soil or the fertilizers used.

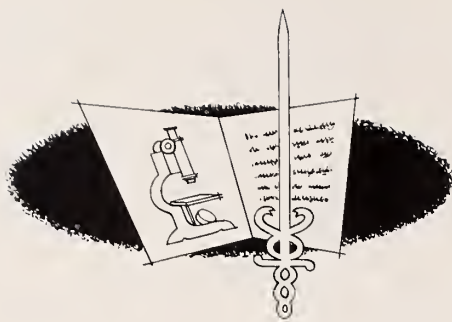
—Wonder power of wonder foods, such as 100 per cent whole grains—cereals, flours, bread, and crackers; honey; maple syrup; blackstrap molasses, or raw vegetables. *The fact:* These are good foods, but they are not wonder foods and do not supply any miracle nutrients.

—Certain types of cooking utensils, especially aluminum, are harmful to foods. *The fact:* The U. S. Public Health Service says hospitals the country over use aluminum cooking utensils. They certainly would not if research had given the slightest suspicion of danger from it.

—Processing removes nutritional values from food. *The fact:* Modern processed foods actually contain more nutrients than the same foods prepared by home cooking methods. Fruits and vegetables are canned or frozen at the peak of nutritional perfection, and flour, bread, milk, and margarine are all improved in processing to supply known dietary requirements.

—Subclinical deficiencies are a constant danger. *The fact:* This statement has no meaning. Subclinical means without symptoms. Normal tiredness or "a worn out feeling" is said by the peddler to be a subclinical deficiency. If such feelings persist, a competent physician should be seen. They may be the forerunner of serious disease.

In conclusion Bell said, "If you suspect a diet deficiency, don't let quacks prescribe for you. Consult your physician . . . Eat sensibly, eat intelligently, eat economically—and for goodness sake, eat FOOD."



cancer page

THE GEORGIA STATE-AID CANCER PROGRAM

IN 1937 the Georgia General Assembly enacted into law a measure designed to provide free treatment for cancer patients who are unable to pay. With the enactment of that measure, Georgia became the first southern state and the fourth of the United States to develop a comprehensive program for the care of indigent cancer patients.

The Georgia law made the Department of Public Health responsible for the organization and administration of the cancer program. The Cancer Committee of the Medical Association of Georgia acts in an advisory capacity to the health department.

Services for indigent cancer patients are provided by means of cancer clinics which have been organized in general hospitals throughout the state. Clinics are approved for participation in the program when they meet the minimum standards recommended by the American College of Surgeons. At present, there are 20 clinics participating in the program.

Each clinic is operated by the physicians on the staff of the hospital. The physicians donate their services free of charge. The State Health Department pays for such services as radium and X-ray therapy at cost and for hospitalization at 75 per cent of the average per diem rate.

Any licensed physician in Georgia may apply for state-aid in behalf of any patient who is believed to have cancer and who is unable to pay. Application forms are available in all county welfare departments. The physician completes the medical portion of the form after which the patient carries it to the welfare department for certification as to indigency.

W. J. MURPHY, M.D., *Atlanta*

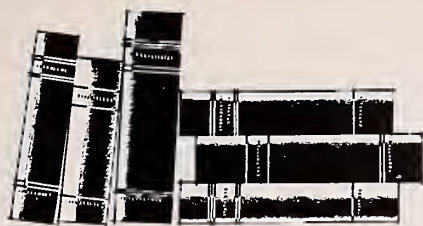
When completed, the application is mailed to the State Health Department following which the patient receives a clinic appointment by letter. Ordinarily, he is referred to the nearest clinic.

The state-aid clinics are not general diagnostic clinics. They are expected to accept patients for examination only when the clinical symptoms are indicative of malignancy. Treatment is provided only for patients with cancer.

The state-aid program accepts responsibility only for services rendered by the cancer clinics. The program does not furnish transportation to and from the clinics nor does it provide pain-relieving drugs for patients with terminal cancer. Such services are furnished, when necessary, by the Georgia Division, American Cancer Society.

The function of the state-aid program is to provide treatment for indigent cancer patients for whom there is some hope of cure or for whom a significant degree of palliation may be anticipated. The program does not provide hospital care for far advanced cases. Patients with advanced cancer who can not be adequately cared for at home may be admitted for terminal care to the Our Lady of Perpetual Help Free Cancer Home, 760 Washington Street, S.W., Atlanta, Ga.

Approved by Professional Education Committee, Georgia Division, ACS.



physician's bookshelf

BOOKS RECEIVED

Hardy, James D., M.S., M.D., F.A.C.S., **PATHOPHYSIOLOGY IN SURGERY**, The Williams & Wilkins Company, Baltimore, 1958, 704 pp. \$19.00.

Wolstenholme, G.E.W., O.B.E., M.A., M.B., B.Ch., and O'Connor, Cecilia M., B.Sc., **CIBA FOUNDATION SYMPOSIUM—NEUROLOGICAL BASIS OF BEHAVIOUR**, Little, Brown, & Company, Boston, 1958, 400 pp. \$9.00.

Edmunds, Vincent, M.D., and Scorer, Gordon C., M.D., **IDEALS IN MEDICINE**, The Christian Medical Society, Chicago (February) 1958, 192 pp., \$3.00.

Wolstenholme, G.E.W., O.B.E., M.A., M.B., B.Ch., and O'Connor, Cecilia M., B.Sc., **CIBA FOUNDATION COLLOQUIA ON AGING, VOLUME 4—WATER AND ELECTROLYTE METABOLISM IN RELATION TO AGE AND SEX**, Little, Brown, & Company, Boston, 1958, 327 pp., \$8.50.

Flint, Thos., Jr., M.D., **EMERGENCY TREATMENT AND MANAGEMENT**, W. B. Saunders Company, Philadelphia, 1958, 539 pp.

Anson, Barry J., M.A., Ph.D. (Med. Sc.) and Maddock, Walter G., M.S., M.D., F.A.C.S., Callander's **SURGICAL ANATOMY**, W. B. Saunders Company, Philadelphia, 1955, 1157 pp.

Blochman, Lawrence G., **DOCTOR SQUIBB**, Simon and Schuster, New York, 1958, 371 pp., \$5.00.

REVIEWS

Wolstenholme, G.E.W., O.B.E., M.B., B.Ch., and O'Connor, Cecilia M., B.Sc., **THE CEREBROSPINAL FLUID: PRODUCTION, CIRCULATION AND ABSORPTION**, (Ciba Foundation Symposium) Little, Brown, and Company, Boston, 1958, 313 pp., \$9.00.

THIS VOLUME is remarkable in several respects. It demonstrates how really beneficial cooperation between a pharmaceutical company and research specialists in any field can be. The Ciba Foundation should be congratulated on this experience. Another unusual feature is the international aspect of the participants of the symposium. The subject matter is of particular interest, because so many problems concerning the circulation of the cerebrospinal fluid confronting the neurosurgeon, neurologist, and morphologist are a complete mystery,

primarily because of the riddle of the circulation of this fluid. Many of these worrisome cul-de-sacs would be soluble if one knew more about this matter. As has been pointed out by one of the essayists in this volume, in a thoroughly excellent summary, the use of radioisotopes will not afford the final answer, despite the earlier optimism that they might, in the complete understanding of cerebrospinal fluid circulation. However, certain interesting clues are presented in this discussion which may afford new avenues of fruitful investigation. This book is a very erudite presentation, with definitely restricted interest, but a very worthwhile reference volume dealing with the latest information on this complex subject.

Robert F. Mabon, M.D.

Harrison, T. R. (Editor): **PRINCIPLES OF INTERNAL MEDICINE**, Third Edition, McGraw-Hill Book Company, New York, 1958, 1782 pp., \$18.50.

THIS VOLUME is intended especially for the medical student and the practicing physician. It attempts to follow the path to a knowledge of medicine in much the same way as the medical student approaches it. There is a very natural order and progression in the arrangement of this work which makes it a very logical approach.

Much of the book has been revised and rewritten. Part Two on the "Cardinal Manifestations of Disease" has been thoroughly revised, as have the sections dealing with "Disorders of Pulmonary and Circulatory Function," in order to bring them into line with the rapid advances in these fields. The section on "Disorders of Nervous Function" has been expanded and descriptions of common psychiatric disorders have been added. The entire book has been expanded to bring into focus the newest advances in medical fields.

Part One discusses the approach to the patient and the methods of handling that patient as an individual. Part Two, "Cardinal Manifestations of Disease," deals with various symptoms and their relations to disease. Part Three covers biologic considerations of inheritance and aging together with neoplastic diseases and physiology. Part Four considers metabolic and endocrine disorders including nutritional deficiencies, hormone disturbances, disorders of bone, muscle, and metabolic diseases. Part Five covers disorders due to chemical and physical agents and their affect upon the body. Part Six is a very large section dealing with the diseases due to biologic agents including the various bacteria,

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

BOOK REVIEWS / Continued

mycobacterial, fungus, and viral infections. Part Seven in this edition is a separate discussion of disease associated with reactions to stress and to antigenic substances. Part Eight includes discussions of the diseases of the various organ systems. Part Nine is now at the end of the volume and gives consideration to general and special problems relating to the care of the patient.

Following each chapter, there is a brief, but very adequate, bibliographic reference. The paper is of excellent quality. The printing is very easily read. This book will be most helpful, not only to medical students, but to all physicians, general practitioners, and internists alike.

Chris J. McLoughlin, M.D.

Higgins, George A., M.D., and Orr, Thomas G., Jr., M.D.: ORR'S OPERATIONS OF GENERAL SURGERY, W. B. Saunders Company, Philadelphia, 1958, 1016 pp., \$20.00.

THE THIRD EDITION of this book, which was begun by the late Dr. Orr, was completed by Dr. George A. Higgins and Dr. Thomas G. Orr, Jr. of the faculty of the University of Kansas School of Medicine. This considerably revised edition covers most all of the operative procedures in the broad field of General Surgery and many procedures in the allied subspecialties of surgery.

The organization of the subject matter is good, making the finding of any given procedure an easy task. It is well written, the terminology being clear and concise and the style being interesting and easily read. It is comprised chiefly of the surgical techniques of well established, generally accepted, and proven surgical procedures. Indications for the procedures, their complications, and their effectiveness are not covered. The numerous illustrations are unusually clear and understandable. Some of the newer techniques of vascular surgery are presented in a laudable manner.

This book should be of great interest and usefulness to all interns and surgical residents. It is a valuable asset to the practicing surgeon for review of the techniques of operations which he performs uncommonly, and it should be of considerable help to general practitioners whether or not they perform surgery.

William H. Moretz, M.D.

Whayne, Col. Tom F., M.D., U.S.A. (Ret.), and De Bakey, Michael E., M.D., COLD INJURY GROUND TYPE, U. S. Government Printing Office, 1958.

THIS IS AN EXCELLENT and very comprehensive discussion of cold injury. It is profusely and well illustrated and contains many interesting tables. Trauma due to cold is considered in relation to battle trauma in general and is also discussed from a historical standpoint, beginning with the Napoleonic Wars and carrying it through World War II.

Very little had been written about cold injury prior to World War I and most of the work done on this injury in World War I had been filed and forgotten prior to World War II. This is the most extensive investigation of injury due to cold that has been pub-

lished to my knowledge, and it is the most thorough, covering the pathology, the epidemiology, the prophylaxis, and the treatment, both immediate and ultimate, of cold injury. This book should be of interest to all physicians interested in military medicine and all those practicing in a cold, damp climate, where workers are subjected to long periods of exposure to cold without adequate protection.

Gleason, Marion N.; Gosselin, Robert E., M.D.; and Hodge, Harold C., Ph.D., CLINICAL TOXICOLOGY OF COMMERCIAL PRODUCTS, The Williams and Wilkins Co., Baltimore, 1958.

IT IS THE OPINION of the staff of the Georgia Crime Laboratory that this book satisfies a tremendous need in the field of commercial toxicology. It is well organized, and written in clear concise language, with a minimum of description necessary for a book of this type.

Larry B. Howard, Ph.D.

Simpson, Keith, M.D.: FORENSIC MEDICINE, Atwood Arnold (Publishers), London, England, Williams & Wilkins Co., Baltimore, 341 pages, 3rd Edition, 1958, \$7.00.

THIS SMALL VOLUME is a fascinating account of forensic medicine as seen by the reader of *Forensic Medicine* at the University of London at Guys Hospital. The initial chapters are devoted to careful deduction of evidence regarding general post mortem changes, gradation as to time, blood groupings, and types of wounds. Of particular interest is the author's meticulous breakdown of age and sex determination relating to cranial sutures, dental identification, and laboratory techniques, chiefly that of blood groupings and superimposed photography X-ray. Dr. Simpson was fortunate enough to observe the massive number of head and chest injuries as well as crush injuries associated with lower nephron nephrosis during World War II Blitz of London. Finally, before considering causes of death, natural as well as homicidal or accidental, he touches on starvation and exposure and has a quite interesting chapter on electrocution.

His presentation of the conduct which a physician should convey in a court appearance is edifying. The importance of straight forward, unbiased, and untainted testimony is stressed. The closing third of this book deals with toxicology, more specifically, beginning with the laws regulating the sale of poisons in England. These laws are closely related and similar to our own Harrison Narcotic Act and the Pure Foods and Drugs Act. The history and clinical findings and the importance of routine laboratory study in suspects is presented. Many formal medical and pharmacological texts are as complete as this little manual in demonstrating the pathology of poisoning. This book would be a fine teaching instrument either under Pharmacology or Pathology Departments, preferably the latter. This is particularly of importance in medical schools not fortunate enough to have their own separate department of Forensic Medicine.

Luther C. Rollins, Jr., M.D.

current clinical concepts

Cancer of the Stomach

IT IS AN ENCOURAGING observation that patients who have had a gastric resection for gastric or duodenal ulcer rarely develop a subsequent gastric cancer. The altered physiology of the stomach resulting from its partial excision does not make this organ more susceptible to neoplastic changes. Cote et al report from the Mayo Clinic that in a 50 year period only five carcinomas of the stomach developing after a gastric resection could be found. These authors emphasize the difficulty of making an early roentgenologic diagnosis because of the rapid emptying of the resected stomach.

Cote, Robert; Dockery, M.B.; and Cain, J. C.: Cancer of the Stomach after Gastric Resection for Peptic Ulcer, *S. G. & O.*, 1958, 107:200-204.

The Rectal Pouch

THE FAMILIAR PROBLEM of hyperchloremic acidosis with hypokalemia are obviated with the use of the rectal bladder. The above problems have been seen in previous uretero-sigmoid anastomoses when performed following resections of the bladder for carcinoma. In these patients, there is a colostomy with the closed rectal pouch being used for the urinary bladder. The advantages of this are: the pouch can be sterilized; there is no reflux of urine with its recurrent pyelonephritis; and there is no large surface for the absorption of the chloride ion and the loss of potassium.

Wills, S. Angier, M.D.: The Rectal Pouch as a Substitute Urinary Bladder, Winning Resident's Paper presented before the 13th Annual Session of the Georgia Chapter of American College of Surgeons, Sea Island, Sept., 1958.

Post-Mastectomy Dressing

SUCTION DRAINAGE has been established as a worthwhile procedure to obtain better healing in certain types of surgical wounds. In wounds involving large skin flaps such as the radical mastectomy and neck dissection the use of suction drainage promotes early adherence of skin flaps to the underlying tissue. By using this drainage technique lighter, more comfortable dressings can be employed.

This method of drainage is quickly and easily instituted by introducing a many-eyed catheter through

a snugly fitting stab wound some distance from the wound edges. The catheter is then connected to constant suction.

This drainage technique has been recently used in the management of several cases of excision of pilonidal cysts. All wounds seemed to heal more promptly than usual. In one involved case requiring a large "T" shaped incision primary healing was obtained much to the surprise of the surgeon.

Suction drainage is a useful procedure—try it.

Sanders, G. B., and Kinnaid, D. W.: Post-mastectomy Dressing with Suction, Atmospheric Pressure, and Breast Binder, *J.A.M.A.*, 1958, 166:1552.

Abdominoperineal Resection

OF THE 268 cases upon which Dr. Waugh's reappraisal is based, patients ranged from 22 to 81 years of age with 169 males to 99 females. In this group there were 131 cases surviving five years. 72 per cent of those patients without positive nodes survived five years and 27.6 per cent with positive nodes survived five years. These figures are comparable to those with the Miles operation. The majority of the patients (78 per cent) recorded satisfactory continence and in this entire group 40 to 50 per cent reported good to excellent continence.

The external anal sphincter is preserved and the descending colon and/or rectosigmoid is brought down and out through the intact external anal sphincter.

Dr. Waugh again emphasized that at least 50 per cent of the carcinomas of the entire colon can be felt with the examining finger in the rectum, an additional 25 per cent can be seen with the use of the sigmoidoscope; whereas only 25 per cent have to be demonstrated using fluoroscopy.

Preservation for Carcinoma of the Mid Rectum: A Reappraisal based on 268 Cases, Presented at the 13th Annual Session of the Georgia Chapter, American College of Surgeons, Sea Island, Sept., 1958.

Arteriosclerosis

WHEN IGNATOVSKI of the Russian Imperial Military Medical Academy reported in 1908 that rabbits fed with milk and egg yolk developed a severe arteriosclerosis, he gave mankind the key to control of a disease which is rapidly becoming more prevalent as living standards rise and infectious disease kill fewer people.

Dock, W.: Research in Arteriosclerosis, The First Fifty Years. (Editorial), *Ann. Int. Med.* 1958, 49, 699.

Steroids In Nephrosis

THE RESULTS OF a seven-year study on 46 patients (35 children and 11 adults) with nephrosis who are on a specific regimen of intermittent

CLINICAL CONCEPTS / Continued

steroid therapy for a prolonged period showed that the mortality of the treated group was reduced from an expected 12.8 deaths to one . . . At present, this regimen, with use of high doses, is recommended for all patients with nephrosis.

Lange, K.; Wasserman, E.; and Slobody, L. B.: Prolonged Intermittent Steroid Therapy for Nephrosis in Children and Adults, J.A.M.A., 1958, 168, 377.

Clean Bowel For Surgery

IN A PANEL discussion on the "Surgery for Colon," Drs. Gilchrist, Waugh, and Morton emphasized the necessity for having a mechanically clean and collapsed bowel to work with during surgery. In addition, all of them used one of the chemotherapeutic drugs for the bowel preparation. Dr. Gilchrist and Waugh used sulfasuccidine when the preparation was performed over several days, and in the ob-

structive cases Dr. Waugh recommended the use of neomycin 24 to 36 hours prior to surgery.

Panel on the Surgery For Colon Cancer, 13th Annual Session of the Georgia Chapter of American College of Surgeons, Sea Island, Sept., 1958.

Pregnancy and Ileostomy

IN A PAPER delivered before the Georgia Chapter of the American College of Surgeons, Dr. R. K. Gilchrist stated that there were no contraindications to pregnancy in those patients who had had total colectomy with abdominal perineal resection of the rectal remnant and ileostomy. Pregnancy in all probability could be carried through to normal delivery at full term. He reported on seven patients who had had 11 successful pregnancies, 10 of which were delivered via vagina.

Gilchrist, R. K.: Pregnancy in Patients Who Have Had Ileostomy and Colectomy. Delivered before 13th Annual Session of The Georgia Chapter of American College of Surgeons, Sea Island, Sept., 1958.

THE NATIONAL INSTITUTE OF MENTAL HEALTH OFFERS GRANT SUPPORT

THE NATIONAL INSTITUTE of Mental Health is offering grant support for a training program for general practitioners and other physicians engaged in the practice of medicine other than psychiatry. Funds are available during the current year (fiscal year 1959) for these grants and training institutions may submit applications at any time.

The program has two purposes:

1. *To foster the development of postgraduate training in psychiatry for the practitioners who wish to increase their psychiatric knowledge and skills in order to be able to deal more effectively with the emotional aspects of illness generally and in order to play a more effective role in the treatment and prevention of mental illness.* These courses will be designed for the physician who plans to continue practicing in his own field.

Grant support is being offered to medical schools, hospitals, clinics, and medical and psychiatric societies for the development and expansion of such postgraduate training in the form of courses, institutes, and seminars. This support does not include fees, subsistence, or travel for the physicians who attend.

Support of this type of training may be for a par-

ticular professional group over a given period, or for training offered regularly as part of the postgraduate curriculum of a medical school, hospital, or clinic, or as part of the educational program of a medical or psychiatric society.

Physicians interested in obtaining this type of training should apply to medical schools, hospitals, clinics, and medical or psychiatric societies which have, or are developing, such training opportunities.

II. *To provide support at an adequate level for psychiatric residency training for physicians in practice who wish to become psychiatrists.* Training stipends up to a maximum of \$12,000 a year are available. The level of payment will be determined by the training institutions who will also make the award to the individual physicians. The National Institute of Mental Health will make awards of grants for this purpose to training institutions and not to individuals.

Physicians interested in support for this type of training should apply to training institutions which are approved for psychiatric residency training.

Inquiries about the program should be sent to Dr. Seymour D. Vestermark, Chief, Training Branch, National Institute of Mental Health, National Institutes of Health, Bethesda 14, Maryland.



the association

MEDICARE FORMS

THE RECENT CHANGES in the Medicare Program have vastly curtailed the care previously authorized for payment. Therefore, in order to determine whether or not the care is authorized, additional information must be given by the doctors when submitting their forms.

The information needed in addition to that previously required is outlined below.

I. The Obstetrical Patient

A. Item 4 on claim must clearly state if the patient is residing with or apart from sponsor.

B. For patients residing apart from sponsor no additional information is required.

C. For patients residing with sponsor one of the two following courses of action will be necessary: (1) The doctor must state on the claim form that the patient was under his care before October 1, 1958, and that she was in her second trimester before that date. A "permit" (reference ODMC No. 16-58) is not required in these cases. (2) If the patient has not reached her second trimester by October 1, 1958 and/or was not under the doctor's care before October 1, 1958, a "permit" is required to be attached to the physician's claim. In either case, the patient's LMP and EDC must be clearly stated on *all* obstetrical forms.

D. Patients residing with sponsor but *on a trip* away from sponsor's household can be provided authorized care without a permit if item 3 or 4 of the form contains the statement "on trip."

II. The Surgical Patient

A. The date of admission to the hospital must be specifically stated as such and separately from the date in item 18 on the claim.

B. For patients entering the hospital on or after October 1, 1958 it must be stated on the claim that "this was a bonafide surgical emergency" or that an acute surgical condition developed which required treatment without delay as time would not permit the patient to anticipate or plan for the care required. All *plannable* and elective surgery has been deleted from the program. To avoid possible delay the physician should submit particulars as to the emergency.

III. The Newborn

A. The date of birth must be specifically stated as such, preferably in item 2. The above rules governing obstetrical patients also determine the eligibility of the newborn. Permits must be submitted where appropriate.

B. The two neonatal office visits will be payable

only if the birth occurs prior to 2400 hours midnight September 30, 1958 and the claim contains a statement to that effect.

IV. Care of Outpatient Injuries

This care will be covered only if the patient contacted a source of care prior to 2400 hours September 30, 1958, and if the source of care so states this on the claim form.

Other Claims

Claims submitted by physicians performing services authorized by the attending physicians (e.g. pathologists, radiologists, anesthesiologists) must contain all of the above information necessary to prove the patient was eligible and the care authorized. Such claims do not require a "permit," where necessary on the attending physicians claim, but must contain a statement by the person executing the certification in item 14 that a "permit" was furnished to the attending physician (identified by name).

Conclusion

Before submission all medicare claims should be carefully checked for completion of all items, and for necessary permits, statements, and dates required by the new restrictions. It should be kept in mind that even if the patient presents the physician with a permit it does not render the government responsible for paying for care which *is not authorized*. A permit is not authorization for care; it merely entitles a patient to care if the care is authorized under the restricted program. These are requirements of the government, not of the Medical Association of Georgia.

ANNOUNCEMENTS

Sectional Meeting of the American College of Surgeons, Francis Marion Hotel, Charleston, S. C., January 19-21. Program will include hospital clinics and sessions at the headquarters hotel. Some sessions will feature a wide variety of papers on surgical subjects, panel discussions on Arterial Occlusive Disease, Management of Gastrointestinal Hemorrhage, and Abdominal Emergency. Symposiums conducted on Cancer and Trauma. Luncheon sessions at which participants in the morning programs will be expected to answer questions from the audience and to enlarge upon the subject matter covered in their morning presentations. Reception and dinner will be held for visiting surgeons and their wives,

and sight-seeing tours and other attractions will be scheduled for visitors.

Course in Neuro-Ophthalmology, January 19-23, 1959, offered by the New York University-Bellevue Medical Center Post-Graduate Medical School. Consists of a review of the anatomy of the nerve fibers, instrumental and non-instrumental perimetry, classification and significance of field defects, types of oculomotor and optic atrophy, chiasmal syndromes, and pupillary reactions. Discussions of the types of abducenpalsy, diverse forms of gaze palsy (Supranuclear palsy) nystagmus, and convergence disturbances. Short review of cerebro-ocular diseases and functional disturbances of the eye. Under direction of Dr. Alford Kestenbaum. Tuition, \$55.00. Write: New York University Post-Graduate Medical School, 550 First Avenue, New York 16, N. Y.

DEATHS

BENJAMIN HARVEY MINCHEW, 76, of Waycross died September 14 after a lengthy illness.

A native of Denton, Dr. Minchew had been practicing medicine in Waycross since 1912. He was a graduate of the Emory University School of Medicine and served as house surgeon, Elkins Goldsmith Hospital, Atlanta from 1909 to 1911, and New York Ear, Eye, and Nose Hospital from 1911 to 1912. He did post-graduate work at Mayo Clinic; Will's Eye Clinic in Philadelphia, Pa.; and the New York Ear, Eye, and Nose Clinic. Dr. Minchew also did graduate work in Paris, France.

In 1940 he organized the Waycross Eye Clinic and for years this clinic served the indigent blind of the Waycross area with Dr. Minchew contributing the medical services.

He served on the staffs of Memorial Hospital, Atlantic Coast Line Hospital, Ware County Hospital, and King's Daughters Hospital.

A past president of the Medical Association of Georgia, Dr. Minchew served the 1936-37 administration. He was also a member of the House of Delegates to the Southern Medical Association, on the credentials committee of the Southern Medical Association, and president of the Georgia Eye, Ear, Nose, and Throat Association in 1936. He was a former president of the Ware County Medical Society, the Eighth District Medical Society, the Atlantic Coast Line Surgeons, and vice president of the Georgia Department of Public Health.

Active in religious and civic organizations, Dr. Minchew was a past deacon of the First Baptist Church. He was a charter member of the Kiwanis Club and served as president. He also was a past commander of the American Legion, past exalted ruler of the Waycross Elks Lodge, past president and charter member of the Okefenokee Golf Club, and chairman of the Waycross Chapter of the American Red Cross.

Survivors in addition to his wife include a son, B. H. Minchew, Jr., M.D. of Johns Hopkins Hospital, Balti-

more, Md.; two daughters, Mrs. Ralph Faulk, Thomasville, and Mrs. Wilson A. Tennant, Manchester; two sisters; one brother; and six grandchildren.

JOSEPH HARRISON MULL, Rome, died September 21 at the age of 66.

A native of Floyd County, he was a graduate of Darlington School and Emory University. He has been a member of the McCall Hospital staff since 1920. During World War I Dr. Mull served in the U. S. Army Medical Corps.

Dr. Mull was a member of St. Peters Episcopal Church, a past president of the Floyd County Medical Society, a member of the Southern and Georgia Medical Associations, and the American College of Surgeons.

Surviving in addition to his widow are his mother, Mrs. Martha Mull, Rome; a daughter, Mrs. Harrison Tillman, Valdosta; a son, Jimmy Sawyer, Rome; a brother; seven sisters; and four grandchildren.

MORRIS J. KUSNITZ, JR. of Alamo, 51, died September 7 after several weeks illness.

Dr. Kusnitz, a native of Connecticut, was state president of B'nai B'rith and president of the Fitzgerald Hebrew Congregation.

He was director of the Wheeler County Development Corp.; a Mason; Shriner; and a member of the Eastern Star. Dr. Kusnitz was a member of the Medical Association of Georgia and the American Medical Association.

Survivors include his wife; three sons, Joel Kusnitz, Warren Kusnitz, and Arnold Kusnitz, all of Alamo; his mother, Mrs. Jenny Kusnitz of Bridgeport, Connecticut; three sisters; and one brother.

SOCIETIES

Stuart G. Blackshere, Gainesville, Ray Thompson of Athens, and Eustice Allen of Atlanta were speakers at a recent meeting of the NINTH DISTRICT MEDICAL SOCIETY. The society met at the Commerce Veteran's Home with Oliver C. Pittman presiding.

At a regular meeting of the WARE COUNTY MEDICAL SOCIETY, Arthur M. Knight, Jr. of Waycross presented the address, "Cardiac Resuscitation." Walter E. Lee, Jr. presided over the meeting which was held at the Hotel Ware.

Dr. and Mrs. Charles R. Andrews, Canton, recently entertained the CHEROKEE-PICKENS MEDICAL SOCIETY at Pine Crest Inn.

Dr. and Mrs. J. H. Nicholson and Dr. and Mrs. C. H. Dickens entertained the members of the OCONEE VALLEY MEDICAL SOCIETY and their wives at a chicken barbecue at a recent meeting.

The SEVENTH DISTRICT MEDICAL SOCIETY met at the Marietta Country Club as the guest of COBB

COUNTY MEDICAL SOCIETY. The scientific session was held in the afternoon, followed by a social hour and dinner in the evening.

PERSONALS

First District

CURTIS G. HAMES of Claxton recently delivered an address to the members of the Metter Kiwanis Club. Dr. Hames spoke on some of the vital findings in research in the field of heart diseases.

Second District

DR. and MRS. PARK Gerdine and family, formerly of Quitman, have moved to Killeen, Texas where Dr. Gerdine has gone into partnership with two other physicians in the operation of a new hospital there.

At a recent meeting of the Georgia Chapter of the American College of Surgeons held at Sea Island, JOHN W. McLEON, Moultrie, was elected a member of the council.

Third District

Members of the Montezuma Kiwanis Club have elected LANGDON CHEVES president for the coming year.

S. A. RODDENBERRY, Columbus, has been elected to the council of the Georgia Chapter of the American College of Surgeons.

Fourth District

ENOCH CALLAWAY, LaGrange, has been named to the newly created post of honorary chairman of the board of the Georgia division of the American Cancer Society at the group's annual meeting held in Atlanta.

Fifth District

R. BRUCE LOGUE of Atlanta has received a Silver Distinguished Achievement Award for his efforts in organizing the Georgia Heart Association, and his interest in its activities during the past decade.

WILLIAM H. HOPKINS, Atlanta, is the new president of the Georgia Trudeau Society, medical wing of the Georgia Tuberculosis Association. Dr. Hopkins was elected during the group's annual meeting held in Savannah.

EDWARD S. WRIGHT, Atlanta, has been elected vice president of the American Medical Society of Vienna, Austria. Dr. Wright recently attended one of the courses at the University of Vienna.

At the meeting of the Board of State Governors of the American Diabetes Association held in San Francisco, California, CHRISTOPHER J. McLOUGHLIN, Atlanta, was elected Chairman of the Board.

JOSEPH S. SKOBBA of Atlanta was guest speaker at a recent meeting of the East Point Lions Club.

The American Academy of Physical Medicine and Rehabilitation has elected HARRIET E. GILLETTE of Atlanta secretary of the group for the coming year.

At the Tenth Annual Meeting of the Georgia Heart Association held in conjunction with its Scientific Sessions at the General Oglethorpe Hotel in Savannah, J. GORDON BARROW of Atlanta was elected president of the Association.

MURDOCK EQUEN, Atlanta, was listed in the September, 1958 issue of *Caduceus of Kappa Sigma* under the section of "Science and Medicine" as one of the "Famous Alumni of Kappa Sigma."

At the Annual Meeting of the Southern Electroencephalographic Society in Houston, Texas in September, DONALD S. BICKERS was re-elected Secretary-Treasurer of the Society. Dr. Bickers presented a paper on "Uses of Electroencephalography during Open Heart Surgery."

Sixth District

WILBUR M. SCOTT, Milledgeville, has been named President of the Medical Staff at Baldwin County Hospital.

The Macon Hospital Commission has announced the appointment of WILLIAM H. SOMERS, Macon, as director of the hospital's department of radiology.

CHARLES RICHARDSON, JR., Macon, has been named to the council of the Georgia Chapter of the American College of Surgeons.

Seventh District

Public health officer for Bartow, Gordon, and Cherokee counties VIRGINIA MALEY, Cartersville, has been granted a year's educational leave from her duties in order to study toward a masters degree in public health administration at the University of North Carolina.

GEORGE PERKINS, Rome, director of the Floyd Health Department, attended a Maternal and Child Health Seminar in Daytona Beach, Florida recently.

Eighth District

ARTHUR M. KNIGHT, JR. of Waycross was elected vice president of the Georgia Heart Association at the Tenth Annual Meeting of the group which was held in Savannah.

Ninth District

W. H. GOOD, Toccoa, is a contributor and co-author of a book which has just been published titled, "The Physician and Group Practice."

The Georgia Chapter of the American College of Surgeons has named CHARLES ANDREWS of Canton to its council.

Dr. and Mrs. JOE J. ARRENDAL and daughter of Cornelia have returned from Europe where they attended the World's Fair in Brussels and traveled in Scotland, England, and Germany.

Tenth District

At the annual meeting of the Georgia Tuberculosis Association held in Savannah, ROBERT G. ELLISON of Augusta was elected president.

WILLIAM F. HAMILTON, Augusta, has received a Distinguished Achievement Award from the Georgia Heart Association for his contributions to the knowledge of heart disease through research at the Augusta medical center.

At a recent meeting of the Augusta Association for Retarded Children, THEO THEVAOS of Augusta was guest speaker.

THOMAS GOODWIN of Augusta has been elected president of the Georgia Chapter of the American College of Surgeons.

THE MONTH IN WASHINGTON

FOR MANY YEARS a number of students of government have been searching for some way of checking the growth of the Federal bureaucracy and returning certain functions to the states.

Two particularly vexing problems are involved. Because the Federal government has moved into so many taxation areas, states complain that even if they wanted to regain control over certain programs, they would have no way of paying for them. Also, a fool-proof mechanism would have to be devised to insure that the programs didn't break down during the transition and that the states would in fact keep up the activities after U.S. dollars stopped coming.

If the administrative details could be worked out, and if Congress would agree to reverse the trend, a number of U.S. Public Health Service grants programs presumably could be turned over to the states.

President Eisenhower is deeply interested in attempting to turn the tide, and last year the Administration came up with a concrete proposal. It was to make the states completely responsible for the water pollution control operation (\$50 million annually in U.S. grants) and vocational education (\$35 million a year). So the state would have money to finance the work, the U.S. would drop part of its tax on telephone service, inviting the states to levy their own tax.

Congress was cool to the idea. Besides, after giving it more consideration, the then Secretary Folsom of HEW decided it wouldn't work because the low-income states couldn't realize enough from the telephone tax to meet the extra expenses.

But the Administration hasn't given up hope. Supported by the federal-state joint action committee, Secretary Flemming (Folsom's successor) is proposing a new method, one that he thinks will meet the problem of the low income states.

He would shift to the states the same two programs—water pollution control and vocational education. At the same time the U.S. would forego 30 per cent of the present tax it imposes on telephone service and permit the states to levy this amount. In addition, to take care

of the poor states the U.S. would allocate among states an amount equal to 10 per cent of the present telephone tax, distributing relatively larger shares to the low per capita income states.

In dollars, as explained by Secretary Flemming, the states would be losing \$85 million in U.S. grants, but they would have an opportunity to collect a total of about \$109 million on telephone service and receive \$36 million in the new grant arrangement.

In announcing that the Administration was going to try again to have this idea adopted, Mr. Flemming emphasized that both programs were of great value and shouldn't be allowed to "drop through the cracks in the floors" during the period of transition. He noted that under his proposal the U.S. could step in and make a state use the money for the specific purpose if it showed an inclination to collect the tax but spend the money somewhere else.

The question now is whether Congress will show any enthusiasm over the plan. At any rate, it will be opposed vigorously by the telephone industry and vocational education interests. The latter are fearful that their programs might suffer under all-state operation.

Notes

HEW is giving careful study to the Bayne-Jones report which proposed a doubling of U.S. medical research spending and early construction of 14 to 20 medical schools. Secretary Flemming told a press conference that final estimates of the cost of carrying out some of the report's proposals are due to be finished in December.

* * * * *

Social Security Administration reports a sharp rise in volume of appeals from applicants denied social security benefits, mostly under the disability section enacted two years ago. The Administration's staff of referees has been increased four-fold in two years to handle the work load. Three times as many hearings are held on disability claims as on all others combined.

FLORIDA MEDICAL ASSOCIATION ISSUES MEMO

THE FOLLOWING MEMORANDUM has been received from the Florida Medical Association concerning the American Registry of Doctors' Nurses. It is published here for the benefit of Georgia doctors who have requested information regarding this matter.

"Numerous requests have been received from other medical associations regarding the American Registry of Doctors' Nurses, of Marianna, Florida, which has circulated promotional ma-

terial over the United States and carries on its letterhead the names of a number of physicians.

To the best of our knowledge, the physicians listed on the letterhead of this organization are not members of the Florida Medical Association nor are they residing or practicing in Florida."

The Attorney General, State of Florida ruled on April 8, 1958 (Opinion No. 058-123) that the American Registry of Doctors' Nurses was in violation of the Nursing Practice Act of Florida.

DOC MAG HEALTH COLUMN COMMITTEE MEETING

THE TENTH MEETING of the MAG Health Column Committee was called to order Wednesday, October 8, 1958, MAG offices, Academy of Medicine at 7:00 P.M. by Chairman H. C. Derrick, Jr., LaFayette.

Present in addition to the Chairman were Lamar Glass, Atlanta; Jule C. Neal, Jr., Macon; C. J. Wyatt, Jr., Rome; E. P. Inglis, Marietta; Mrs. Bob Christian; Mr. John Kiser, and Mrs. Emily Grinalds.

Mr. Kiser first suggested to the committee that because of the tremendous amount of publicity given to Rabies by the Atlanta papers, it would be timely to switch the Health Column scheduled for October 13, and use a column ready for release entitled "Rabies Can Be Kept Down." This was so voted.

Articles to be discussed at the next meeting were selected as follows: "Poisoning Accidents," McPherson; "Vaginitis," Neal; "Ruptured," Glass; "Constipation," Derrick; "Indigestion and Heartburn," Inglis; "Cataracts," Neal (Martin); "Tonsils," Neal (Barton), and "Shingles," Derrick.

At this time, it was decided by the Committee to meet one more time before Christmas, so the next meeting of the DOC MAG Health Committee will be held on October 22, 1958, at 7 P.M. at the Academy of Medicine in Atlanta.

After considerable discussion and some corrections, the following articles were approved for release:

1. "That Sneeze May Mean Hay Fever"
2. "Control Your Diet During Pregnancy"
3. "Don't Wonder If It's Cancer—Find Out"
4. "Hunt Safely"
5. "Premenstrual Tension Is Widespread."

The Committee then went on record as urging Mr. Kiser to write a letter of appreciation and thanks to W. D. Jarrat of Macon, and Braswell E. Collins, Macon, who have contributed articles for publication upon request of Dr. Neal.

The following articles were then discussed:

"Rheumatic Fever," Wyatt; "Arthritis," Inglis; "Blood-Vomiting," Glass; "Painful Menstruation," Neal; "Glaucoma," Collins; "Industrial Accidents," Derrick, and "Eye Injury," Neal (Jarratt).

Articles still pending are "Skin Problems" (Glass-Hearin), "Bed Wetting" (Yochem), "Convulsions" (McPherson), "Sore Throat and Earache" (McPherson), and "Quacks" (Kiser).

It was mentioned that "Gout," "Club Feet," and "Blood Tests" would be fine articles for future publication.

There being no further business, the meeting was adjourned.

COUNCIL COMMITTEE ON MEDICAL SCHOOL COURSES COMMITTEE MEETING

THE COUNCIL COMMITTEE on Medical School Courses met September 28, 1958, in Atlanta. Members of the Committee present included Chris J. McLoughlin, Chairman, Atlanta and T. A. Sappington, Thomaston. Also in attendance were Harry O'Rear, Dean of Faculties, Medical College of Georgia, Augusta, and Charles LeMaistre, Chairman of the Department of Preventive Medicine, Emory University School of Medicine, Atlanta.

Chairman McLoughlin reviewed the experience of 1958 MAG sponsored "Art of the Practice of Medicine," a senior medical student course held at both the Medical College of Georgia and Emory University School of Medicine. After discussion it was agreed that the 1959 course would follow the pattern established in the original course of study with the supplemental use of Mead Johnson Company film strips and booklets and the AMA-Sears Roebuck booklet on "The Business Side of Medical Practice."

Titles of the 10 lectures in the series were set as follows:

- (1) "Where Should I Practice and Types of Practice;" (2) "Financing the New Practice;" (3) "Economics of an Office Practice;" (4) "Public Relations and Medical Organizations;" (5) "Hospital Relations;" (6) "M.D.'s Personal Economics;" (7) "Continuing Medical Education;" (8) "Ethics;" (9) "Religious Aspects of Medical Practice;" and (10) "Physician and His Family."

It was further agreed that the course be aimed at interns

and residents when held at Emory University School of Medicine and, as in the past, be given to senior medical students at the Medical College of Georgia.

INTERPROFESSIONAL COUNCIL OF GEORGIA MEETING

A MEETING OF the Interprofessional Council of Georgia was held September 17, 1958, in Atlanta. MAG representatives present at this meeting were Chris J. McLoughlin, Atlanta and John K. Davidson, Columbus. Also represented were members of the Georgia Dental Association and the Georgia Pharmaceutical Association.

Dr. McLoughlin reported that the MAG Council had approved an Interprofessional Council letter recommendation advising the pharmaceutical industry concerning the promiscuous sampling in stock packages of certain drugs.

Mr. Mudter (GPA) discussed the problem of prescriptions for drugs under major medical insurance policies and the problems involved in the hospital dispensing of drugs. It was recommended that the physician should aid and assist in seeing that qualified personnel (M.D. or Pharmacist) dispense these drugs.

In other actions of the Council a code of cooperation for doctors, dentists, and pharmacists was discussed; certain dental care problems in connection with Blue Shield-Blue Cross were explained; and it was voted to purchase letterhead stationery for the Council.

INSURANCE AND ECONOMICS COMMITTEE MEETING

THE MAG INSURANCE AND ECONOMICS Committee met October 12, 1958, in Atlanta. Members of the Committee present included: David R. Thomas, Chairman, Augusta; Charles S. Jones, Co-Chairman, Atlanta; Luther Wolff, Columbus; John Elliott, Savannah; Herbert Olnick, Macon; W. L. Pomeroy, Waycross; and W. Perrin Nicholson, III, Atlanta. Also in attendance were members of the insurance industry representing the Health Insurance Council of America, Georgia Chapter.

Chairman of the MAG Council Committee on Standardization of Insurance Forms Dr. Joseph Mercer presented the recommendations of his committee to the members of the Insurance and Economics committee. It was voted that these standardized forms for use in Georgia be submitted by mail to each member of the Insurance and Economics Committee to better allow the full committee to make a recommendation to MAG Council. These forms were (1) a Medical-Surgical Insurance Coverage Standard Claim Form, (2) an Industrial (weekly) Standard Claim Form, and (3) a request that "Proof of Death" be certified by the Death Certificate unless more data is sought by the insurance company, in which case this data could be obtained from the physician at a small fee.

Herbert Olnick presented data requesting that radiology insurance fee payments be removed from hospitalization policies and be included in medical payment coverage policies. Dr. Olnick also asked that consideration be given to inclusion of radiology coverage in the Georgia Plan. He further stated that there should be some provision for radiology coverage on an outpatient basis.

Dr. Thomas appointed a subcommittee to meet with the Welfare Department to discuss certain aspects of welfare coverage of indigent patients. The subcommittee is to be headed by W. Perrin Nicholson with Thomas Floyd and E. S. Marks as members.

A resume of certain retirement plans for MAG members was discussed and deferred for further study.

Health insurance for the aged was thoroughly discussed and the progress in this field noted. This problem was referred to members of the Health Insurance Council for further study.

MEDICAL ASSOCIATION OF GEORGIA 1959 Annual Session

Bon Air Hotel
Augusta, Ga.

May 17-20,
1959

FOREIGN GRADUATE MEDICAL TEST

MORE THAN ONE THOUSAND graduates of foreign medical schools have taken the second American medical qualification examination of the Educational Council for Foreign Medical Graduates. The examination was given in more than 60 examination centers throughout the world.

The Educational Council for Foreign Medical Graduates, with headquarters at 1710 Orrington Avenue, Evanston, Illinois, was founded in 1957 to aid graduates of foreign medical schools establish their qualification to assume internships or residencies in United States hospitals.

Sponsoring organizations of the ECFMG are the American Hospital Association, the American Medical Association, the Association of American Medical Colleges, and the Federation of State Medical Boards of the United States.

A total of 298 candidates took the first examination, held last March in 17 centers in the United States, and 152 received a passing score, Dr. Dean F. Smiley, ECFMG executive director, said.

The forthcoming second examination is the first to be given at examining centers abroad as well as in the United States. 30 centers have been estab-

lished in Latin America, the Far East, the Middle East, and in Europe.

All of the 1,136 candidates taking the 7½-hour examination have had their credentials approved by the ECFMG as having had 18 or more years of formal education, including at least four in a recognized medical school, Dr. Smiley said. He added that the examination tests the candidates' knowledge of English as well as medicine.

Foreign medical graduates passing the examination who enter the United States on exchange visitor visas may participate in the National Intern Matching Program or may apply directly to a hospital for an internship or residency, Dr. Smiley said.

Foreign medical graduates passing the examination and entering the United States on immigrant visas may be admitted to licensing examinations in at least 14 states. A number of the medical specialty boards in the United States will accept certification by the ECFMG as satisfying their requirement that candidates for their certifying examinations are graduates of approved schools of medicine, according to Dr. Smiley.

Two American medical qualification examinations will be held in 1959, on Feb. 17 and Sept. 22.

WILKES COUNTY HONORS VETERAN DOCTOR

WILKES COUNTY'S beloved doctor, Addison Simpson, Sr., was honored at halftime of the Washington-Elberton football game in Washington, Georgia.

A crowd of more than 500, including a number of former Washington High coaches and players, paid tribute to the 82 year old doctor who served for 40 years as team physician.

Dr. Simpson was driven to midfield where he was welcomed and presented a plaque and book of letters by Dr. Charles Willis, one of the former Washington players. Standing in line before him were team members representing each of the 40 years.

"I am more proud and more grateful upon this occasion than words can express," Dr. Simpson said during his brief talk. As he retired to the waiting car and was driven from the field, the overflow crowd

stood and the Washington High School band played the school's alma mater.

A native of Wilkes County, Dr. Simpson retired several months ago after some 60 years of service as a Washington physician. He is a former councilman and member of the Board of Education, and has been active in all phases of civic life. He also has been a leader in the Presbyterian Church for many years. He is author of a book, "The Life and Services of the Rev. John Springer."

Dr. Simpson's three sons, Albert Simpson, M.D., Addison Simpson, Jr., M.D., and Graham Simpson are former members of the Washington High football team and a grandson, Addison Simpson III, is a member of the current squad.

—Augusta Chronicle

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*Skillful continuous administration of sedatives
is often lifesaving in the management
of this dangerous infection.*

THE TREATMENT OF TETANUS WITH INTRAVENOUS SODIUM AMOBARBITAL

John T. DuPree, M.D. and Hugh K. Sealy, M.D., *Macon*

ALTHOUGH TETANUS is not a common disease in our area, it does occur infrequently. The mortality rate of tetanus in report series is 30 to 60 per cent.¹ If the patient is to survive his illness, skillful management is required. The primary aims of therapy are to prevent spread of the disease by the use of antitoxin and to maintain life in the patient until that antitoxin already fixed in the tissues is exhausted.² The spasms of tetanus may cause death by apnea, respiratory obstruction, or exhaustion. Prevention or control of these spasms is one of the primary aims of therapy in tetanus. This can be accomplished either by the use of muscle relaxants, such as mephenesin or curare, or by the use of sedation or "hibernation." Some of these drugs are almost as hazardous to use as the disease itself.^{3, 4, 5} We would like to present the regimen, the administration of sodium amobarbital by intermittent intravenous drip, that we have used in two patients and have found relatively safe and simple. We will present the case history of one of these patients in detail.

J. F., a 13 year old white male, was admitted to the Macon Hospital at 10:00 P.M. on June 20th.

Five days previously he had received a puncture wound of his left foot from a splinter. He was seen by his family physician who gave him an injection of penicillin and dressed the wound. He did not receive tetanus antitoxin or a booster dose of tetanus toxoid. The family did not believe he had received tetanus immunization in infancy. He had gone to a Boy Scout camp the day after his injury and, as far as was known, he was well until about eight hours before admission. He first noticed that he could not open his mouth well and had some tightness of his neck muscles. The patient denied any other symptoms prior to this.

Upon physical examination the pulse rate was 76, temperature 98 degrees, and blood pressure 120/65. The patient was a well developed, well nourished, white male with obvious trismus. The neck muscles were spastic. With any stimulation muscular spasm became more marked. He had an infected puncture wound on the plantar surface of the left foot.

The patient was given sodium phenobarbital, 3 grains, intramuscularly on admission. He was given 500cc of normal saline with 40,000 units of tetanus antitoxin intravenously after he became relaxed. Two and a half hours later, 2½ grains of sodium phenobarbital and 1/150 grain of atropine were given intravenously. This seemed to produce good

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TETANUS / DuPree

sedation and relaxation and under sodium thiopental, cyclopropane and nitrous oxide, and oxygen anesthesia, the tissues surrounding the wound were injected with an additional 40,000 units of tetanus antitoxin and the wound was excised and left open. A tracheotomy was performed at the same time. A culture was obtained from the wound and this later grew *Clostridium tetani*. He withstood the procedure well and was returned to the floor.

A regimen of 3 grains of sodium phenobarbital subcutaneously every four hours and as necessary to control his muscular spasm was begun. During the first 24 hours on this regimen he received a total of $26\frac{1}{2}$ grains of sodium phenobarbital but the spasms were poorly controlled. On 6-22-56 the dosage was increased to 6 grains as was needed to control the muscular spasm, and during the next 12 hours he received 18 grains of sodium phenobarbital with very poor results. Because of the poor control of the muscular spasm a constant intravenous drip of sodium amobarbital was started. A solution was prepared containing 2 grams of sodium amobarbital in 1000cc of five per cent glucose in distilled water. During the first four hours on this therapy he received a total of 2 grams of sodium amobarbital and developed marked respiratory depression. The intravenous drip of amobarbital was then given intermittently. The needle was kept in place in the vein constantly and kept open by a very slow drip of from 2000 to 3000cc of five per cent glucose in distilled water per day. In one liter of the fluid 15 units of aqueous ACTH was added daily. The solution of sodium amobarbital was connected to the constant I.V. drip by the use of a three way stopcock. Amobarbital solution was allowed to run in as was necessary to maintain muscular relaxation. Sedation was maintained at a level that would prevent muscular spasm with slight stimuli such as room noises, but not so deep as to prevent spasm with noxious stimuli such as suction of the tracheotomy tube and injections. During the first five days on this therapy he received approximately 2 grams sodium amobarbital per day. After this, the requirement increased to 4 grams per day until the 16th hospital day, when there was a further increase to 6 grams daily. At this time the concentration of sodium amobarbital was increased to 3 grams per 1000cc of fluid. On the 18th hospital day he developed marked respiratory depression that responded quickly to artificial respiration and intravenous injections of caffeine sodium benzoate. Thereafter, the concentration of the fluid was reduced to 2 grams per 1000cc. On the 20th hospital day the requirement of sodium amobarbital began to decrease. His level of consciousness began

to improve on the 23rd hospital day. Two days later, however, he developed marked muscular spasm. It was our opinion that these were withdrawal symptoms and for this reason he was given amobarbital for five minutes each hour. This was decreased to two minutes per day two days later. At this time he could obey simple commands. On the 28th day he was talking, turning himself, and required only 1 gram of sodium amobarbital per day. He continued to have mild trismus and muscular spasm. Intravenous fluids were discontinued on the 30th hospital day.

Procaine penicillin in a dosage of 600,000 units every eight hours was initiated soon after admission and continued for five days.⁷ The dosage was then reduced to 600,000 units daily and this maintained until the 24th hospital day. Aqueous ACTH was given by constant intravenous drip over an eight to 12 hour period each day. The original dose was 20 units per day, which was continued five days. The dose was then reduced to 15 units per day. On the 10th hospital day he developed mild urticaria which disappeared on increasing the ACTH to 20 units for two days. The dosage was then reduced to 15 units and kept at this level until the 21st hospital day. The dosage was then gradually reduced over the next eight days. He received daily injections of 10,000 units of tetanus antitoxin for ten days. While under our care he was given permanent immunization with tetanus toxoid. A Levin tube was inserted on the sixth hospital day. His intravenous feedings were then supplemented with sustagen tube feeding and orange juice by the Levin tube. The patient was discharged on the 38th day, apparently completely recovered from his prolonged illness. There was no evidence of any permanent complications. He is now well and without residua.

In summary, this patient had tetanus, coming on five days after an injury, and marked muscular spasm appearing eight hours after his first symptoms. He received a total of 94.3 grams, or 1,414 grains of sodium amobarbital and 3 grams, or 45 grains of sodium phenobarbital during a 38 day hospital course.

This represents a severe, prolonged case of tetanus. There were two factors which seemed to greatly influence the mortality in this disease. Hippocrates first noticed the inverse relationship between the incubation period and the severity of the disease. Mortality rate in all cases of tetanus varies from 30 to 60 per cent in various series reported in the recent literature. It has been stated that an incubation time of less than ten days doubles this mortality rate. The onset time is the time from the first symptoms until the development of severe tetanus, which in our patient was about eight hours. If the onset

time is less than 48 hours, the mortality rate is greatly increased. The only factor besides age which seems to influence the course of the disease is the time after the onset of symptoms until therapy is started. Thus, in this patient two of the chief factors which seemed to influence the mortality, short incubation period, and onset time were against us here.

Treatment

We decided to use sodium amobarbital in this patient after an unsuccessful attempt to use sodium phenobarbital. We felt that sodium phenobarbital was unsatisfactory because of its slow acting time and its cumulative effects. A drug to control the spasm of tetanus should be short acting to prevent apnea that accompanies the spasms of tetanus which may produce irreparable brain damage or death. We felt that the cumulative effects of the sodium phenobarbital made it difficult to accurately judge the dosage needed to control the spasm and produced marked respiratory depression. We considered the use of Mephensesen,[®] but one of us had had previous experience with this drug and had not been satisfied with the results. It is more difficult to administer and requires constant attendance of highly trained personnel. Curare, because of its dangers of respiratory paralysis and the necessity of an anesthesiologist to administer it, has largely been abandoned. Sodium amobarbital has many of the advantages of the above drugs without some of their disadvantages. It is effective quickly enough, when used intravenously, to be used to stop an episode of muscular spasm as it develops. The dosage can be titrated, as in this patient, to maintain a level of sedation that will prevent spasms with very mild stimuli but not so deep as to allow respiratory paralysis. It has some cumulative effect that will maintain sedation. Laryngospasm, often produced by the ultra short acting barbiturates, is not likely to occur. The use of intermittent drips made use of many of the advantages of this drug. The constant drip method in our hands quickly resulted in respiratory depression. The drug was administered by registered nurses throughout this patient's course. On only two occasions did any difficulty develop. The first was respiratory depression which responded quickly to intravenous caffeine, sodium benzoate, and artificial respiration. As the dosage of the drug was being reduced the patient developed spasms which were attributed to the rapid withdrawal of the drugs. These were prevented from recurring by a drip of a few minutes out of each hour for eight days.

Others have stressed the importance of tracheotomy in patients with tetanus and we would also like to emphasize this point.⁶ We feel that it should be

done in all moderate and severe cases that will require prolonged sedation. It is important to decide in which cases to use it rather early in the course of the disease in order that the tracheotomy can be done before the need for it becomes desperate. Tracheotomy will provide an open airway and a method for suctioning the trachio-bronchial tree to prevent atelectasis and aspiration which are common causes of death in patients with tetanus and patients who are under prolonged sedation. We can find no reference to the use of ACTH, as in this case, although cortico-steroids have been used previously. These drugs serve two purposes. They will control the symptoms of serum sickness which are likely to develop in patients receiving 100,000 units of antitoxin. Serum sickness may well aggravate the tetanus. In many patients with tetanus, hyperpyrexia is a problem and increases the irritability of the muscles. ACTH, as is well known, will help control temperature elevation. The administration of aqueous ACTH in the fluid already used to maintain the intravenous drip provides a convenient and economical method of administering this drug.

Penicillin is effective against clostridium tetani but probably has very little effect on the course of this disease. It is recommended, however, as prophylaxis to prevent respiratory infections which frequently cause the patient's demise.

After reviewing this case history we feel that this patient received too much antitoxin and that it should not have been continued beyond the initial injections. We have no means of determining the optimal dose of antitoxin. Most authorities, however, recommend a total dose of 100,000 units divided into intravenous, intramuscular, and the local injection routes. The antitoxin should not be given until the patient has been carefully tested for sensitivity, and at the time of administration adrenalin and solu-cortef should be at the bedside for emergency use. As mentioned above, the tetanus antitoxin has no effect on the toxin already fixed in the nervous system but combines with any circulating toxin. The patient with tetanus will produce his own antitoxin 13 to 15 days after the infection develops, and the original injection should offer immunity for that length of time. We would also like to stress the importance of permanent tetanus immunization while the patient is under the physician's care, as tetanus does not produce permanent immunity.

General Care of Patient

Although we feel these other factors are of the greatest importance, the general care of the patient should never be neglected. The patient is to be kept in a quiet, darkened room where all noises are

kept at a minimum. If possible, we believe it is important to have the room at the end of the hall away from most of the ward noises. Visitors should not be allowed in the room and all talking should be kept to a minimum. We feel that it is important to supplement the patient's intravenous fluids with a well balanced tube feeding. A commercial food supplement such as Sustagen® or Geval® may be used but care should be taken not to have too great a concentration of protein or carbohydrates. Before the installation of tube feeding the stomach should be aspirated to be certain that there is no over distension. The aspirate may be reinjected. Bowel care was a small problem in our patient but the use of the small disposable enemas now available would seem to offer an ideal solution to this problem.

753 Pine St.

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PUBLIC ATTITUDES TOWARD HEALTH INSURANCE

SEVEN OUT OF TEN persons with health insurance express "complete satisfaction" with it, Health Information Foundation has reported.

This is one major finding of "Public Attitudes Toward Health Insurance," a research study by Eliot Freidson and Jacob J. Feldman based on a Foundation-supported survey by the National Opinion Research Center of the University of Chicago.

The survey consisted of detailed interviews with a representative cross section of the American public—almost 2,400 persons in all—as well as with some 500 doctors named by the public as their family physicians.

The N.O.R.C. study, still in preparation, deals with a wide range of topics relative to health and health services. The Foundation's report is limited to what the public and family doctors said about voluntary health insurance. At the time the survey was made in 1955, two out of every three persons interviewed had some form of hospital, surgical, or medical insurance. Seven out of ten insured persons were completely satisfied with their policies. Even among the minority without health insurance, three out of five thought that such insurance was a good idea.

About a quarter of the insured persons mentioned specific ways in which they felt existing coverage could be improved. Common suggestions were that insurance should cover more services (such as doctors' home and office visits) and a higher proportion of the total bills for presently-covered hospital-

surgical services. One person in six complained that premiums were too high.

Does having health insurance make a difference in the way you are treated when sick? Almost four-fifths of the public said no, according to H.I.F. On the other hand, 94 per cent of the doctors interviewed felt that having insurance affects the way a *patient* behaves when ill.

Insured patients, family doctors said, are more willing to undergo needed hospitalization and surgical treatment and are more likely to seek medical attention in time. Only one doctor in five felt that having health insurance encourages patients to get unnecessary medical care. And three out of five physicians claimed that their own handling of a case is *not* influenced by the fact that a patient is insured.

"The public's regular doctors appear less satisfied with present health insurance than are their patients," the H.I.F. report states. When these doctors were asked if insurance should cover any costs it doesn't cover now, "only 35 per cent expressed satisfaction with present benefits. 59 per cent felt that benefits should be increased."

What added benefits are needed, as these doctors see it? The main suggestion dealt with coverage of diagnostic procedures and medical care outside hospitals. A less urgent need, physicians said, was for extension of coverage of hospital and surgical services.

All patients with aneurysms of the abdominal aorta and its branches should be excised and grafted unless the patient's general condition precludes a major operative procedure.

SURGICAL TREATMENT OF SEGMENTAL ARTERIOSCLEROTIC PERIPHERAL ARTERIAL LESIONS

Milton F. Bryant, M.D., *Atlanta*

VASCULAR SURGERY HAS progressed from an "era of ligation" to an "era of anastomosis." During the past ten years the direct surgical approach to segmental thrombo-occlusive arterial disease and to arterial aneurysms has become an accepted surgical procedure. If possible, defects in the peripheral vascular tree are now corrected by restoration of venous or arterial continuity.

The most common cause of disease in the peripheral arteries is arteriosclerosis. In general, three types of arteriosclerosis are recognized—hyperplastic arteriosclerosis, medial arteriosclerosis, and atherosclerosis.

Hyperplastic Arteriosclerosis

The only peripheral vascular disease that occurs in association with hyperplastic arteriosclerosis is hypertensive ischemic ulceration of the legs. Biopsy and microscopic study of these ulcers show hypertrophy and thickening of the medial coat of the small arteries and arterioles. Proliferation of the vessel wall leads to occlusion of the lumen and gangrene of the overlying skin. These ulcers are usually seen in women between the ages of 40 and 70 who have had long standing hypertension. The lateral side of the ankle and leg are favorite sites for these ulcers. Treatment is directed toward clearing the secondary infection, skin grafting the ulcers if primary healing does not occur, controlling the hypertension, and increasing the blood supply to the involved extremity. If conservative measures fail, lumbar sympathectomy should be considered.

Medial Arteriosclerosis

Medial arteriosclerosis is characterized by degenerative changes in the medial coat of medium-sized and large arteries. Atherosclerosis may be associated with medial arteriosclerosis, or atrophy, fibrosis, necrosis, and calcium deposition may occur in the media without associated fatty infiltration of the intima. Degeneration of the media results in weakness of the arterial wall which may lead to rupture or to a localized, permanent dilation of the artery-aneurysm formation.

Cystic medial necrosis of Erdheim and Moritz is a special form of medial arteriosclerosis. This type of arteriosclerosis is the usual cause of dissecting aneurysms of the aorta. In the past the treatment of dissecting aneurysms of the aorta has been symptomatic; however, recently DeBakey¹ and others have successfully operated upon patients with this disease.

Arteriosclerotic aneurysms most commonly involve the thoracic aorta, abdominal aorta, femoral, and popliteal arteries. Many of the arteries which develop aneurysms lack the support of surrounding skeletal muscle and frequently are subjected to constant strain by crossing flexion creases. Most arteriosclerotic aneurysms develop in males over age 50 (M/F ratio is 8/1).

Approximately 50 per cent of patients with abdominal aortic aneurysms will not have any symptoms. When symptoms occur, pain is the most common complaint. The pain is usually located in the mid-abdominal or low back regions and varies from mild, intermittent discomfort to constant, severe, intolerable pain. As the aneurysm enlarges and encroaches upon neighboring structures, a variety of symptoms ensue.

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ARTERIAL LESIONS / Bryant

On physical examination a pulsating mass along the course of the abdominal aorta will be noted. It is important to elicit bilateral expansile pulsations by placing the index fingers on the lateral sides of the aneurysm. A systolic murmur may be heard over the dome of the aneurysm in about 20 per cent of cases.

Oblique and flat plate roentgenograms usually confirm the diagnosis by showing a mass along the course of the abdominal aorta with an irregular line of calcification along the margins of the shadow. Fluoroscopy often shows the expansile characteristics of the mass. On rare occasions percutaneous translumbar aortography or retrograde femoral arteriography may be necessary to establish the diagnosis; however, most authors feel that this procedure is unnecessary and actually contraindicated in most instances.

There is general agreement that all patients with ruptured aneurysms of the abdominal aorta and its branches should be operated upon as quickly as possible. Most physicians agree that symptomatic aneurysms of the abdominal aorta and peripheral arteries should be operated upon. There is still disagreement concerning patients who have asymptomatic abdominal aortic aneurysms—particularly if they are small.

The report of Estes² is often quoted in pointing out the grave prognosis of patients with aneurysms of the abdominal aorta. He found that 33 per cent of patients with untreated aneurysms of the abdominal aorta were dead within one year following diagnosis and 81 per cent were dead within five years. Most of these patients died from rupture of the aneurysm and, surprisingly, the prognosis for asymptomatic aneurysms was no better than the outlook for symptomatic aneurysms. Recent studies by the Metropolitan Life Insurance Company reveal that patients who have a diagnosis of abdominal aneurysm usually die from rupture of the aneurysm. These studies plus experience with the surgical treatment of aneurysms during the past five years have led DeBakey and Cooley³, Kirklin and associates,⁴ and others⁵ to recommend surgical excision and graft replacement for all patients with aneurysms of the abdominal aorta and its branches, provided they do not have an incurable neoplasm or intractable coronary artery disease.

During the past five years we have had the opportunity of treating 13 patients with abdominal aortic aneurysms. (Figure 1). Three of these patients were admitted to the hospital with rupture of the aneurysm and died before emergency surgery could be performed. Seven of the patients have been operated upon successfully and have returned to productive work. (Figure 2). At the present time

they have no symptoms and on examination normal arterial pulsations are present in both legs. (Figure 3). Three other patients have been operated upon; however, they died in the post-operative period. One patient died of aspiration pneumonia seven days following operation and at necropsy the graft was found to be intact and functioning well. Another patient died eight days post-operatively and at autopsy the grafted area was normal; however, he had developed a dissecting aneurysm that originated in the ascending aorta then ruptured through the distal arch of the aorta into the left pleural space. The third death occurred on the second post-operative day and was caused by thrombosis of the graft due to severe thrombo-occlusive disease of both external iliac and femoral arteries resulting in

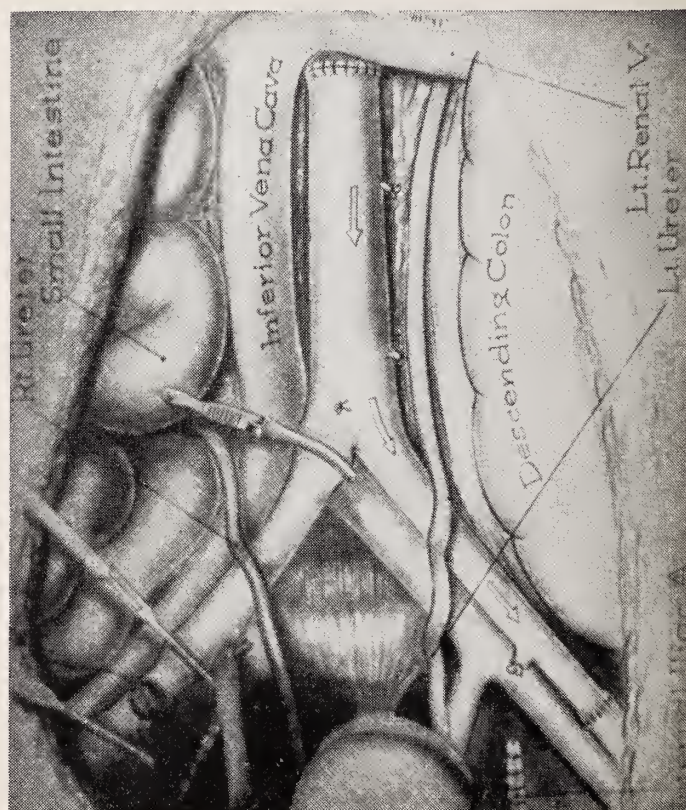


Figure 1: Technique of Restoring Aortic Continuity with a graft.

an inadequate out-flow tract. Admittedly this series is small and the follow-up too short to formulate any definite conclusions.

Atherosclerosis

Like medial arteriosclerosis, atherosclerosis involves the medium-sized and large arteries. Atheroma (plaques containing cholesterol, lipids, phagocytes, fibroblasts and, at times, calcium) form in the intima and as these deposits increase in size they ulcerate and develop thrombi on their surface with resultant partial or complete occlusion of the lumen. The abdominal aorta, cerebral, renal, coronary, iliac, and femoral arteries are most frequently severe-

ly involved with atherosclerosis. Medial arteriosclerosis may occur in combination with atherosclerosis and their relationship to each other is poorly understood. Severe atherosclerosis most commonly affects men between ages of 40 and 70.

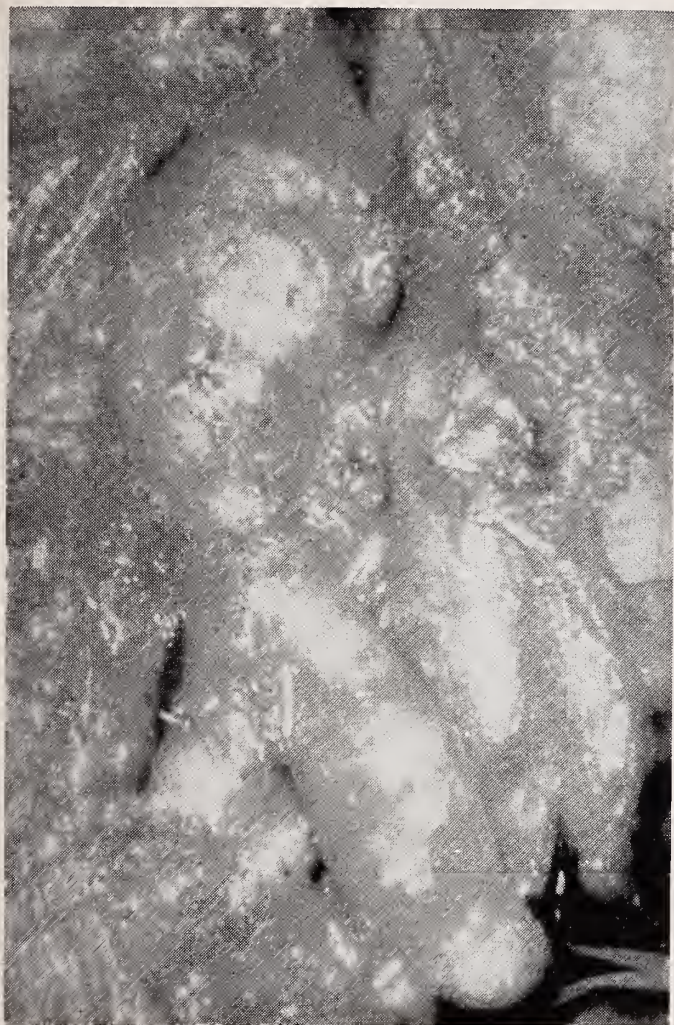


Figure 2: Photograph of an abdominal aortic aneurysm that was operated upon successfully. Note involvement of iliac arteries.

The symptoms and signs associated with advanced atherosclerosis involving the peripheral arteries are well known. Intermittent claudication is the earliest and most common complaint of patients who have organic stenosis or occlusion of the abdominal aorta and its branches. The site of claudication is of considerable help in localizing the area of disease. Exercise pain in the back, gluteal, and thigh muscles suggests stenosis or occlusion of the terminal aorta or iliac arteries. Claudication in the calf muscles is frequently seen with severe thrombo-obliterative disease in the superficial femoral arteries.

The most informative part of the physical examination is palpation and evaluation of the peripheral pulses. With interest and experience one can improve his skill in evaluating arterial pulsations. In general, oscillometry has not been helpful in evaluating patients with peripheral vascular diseases.

Most patients (75 to 80 per cent) with atherosclerotic peripheral vascular disease can be managed successfully with medical treatment. Unfortunately, 20-25 per cent of these patients do not respond to conservative treatment. At the present time there



Figure 3: Appearance of homograft inserted into the aortic bifurcation.

are no absolute criteria for selection of patients for surgical treatment. Most physicians agree that if a patient has progressive symptoms of functional peripheral ischemia in the face of good medical management, or if a patient is unhappy with the status of his claudication, he should be evaluated for surgery. Close cooperation between the family physician and vascular surgeon is essential in outlining the best treatment program for these patients.

Arteriography is a valuable, and frequently an essential, procedure in evaluating patients for arterial grafting. In 1929 Dos Santos et al⁶ developed the technique of percutaneous translumbar aortography. Subsequently this technique has been improved, modified, and extended to include percutaneous femoral arteriography. Both of these procedures are potentially dangerous^{7,8} and should not be performed except in carefully selected patients.

ARTERIAL LESIONS / Bryant

Arteriography should not be performed by anyone who is not thoroughly familiar with the procedure and the complications that may arise.

Long term studies of patients who have been treated by direct arterial grafting or the by-pass procedure as originally described by Kunlin⁹ are not available. It is known that many of these patients have progressive arteriosclerotic disease in the outflow tract which causes subsequent thrombosis of the graft. Unfortunately, this means that some of the grafting procedures are palliative rather than curative.

To date, six patients with occlusion of the terminal aorta have been operated upon. Five of these patients have obtained excellent results with restoration of normal arterial pulsations in both lower extremities. One patient developed lower nephron nephrosis in the post-operative period and, in spite of vigorous treatment, subsequently died. At autopsy the kidney showed the typical picture of lower nephron nephrosis; both renal arteries were patent.

Eight by-pass procedures have been performed for segmental occlusion of the superficial femoral artery. (Figure 4). Seven of these patients have ob-

tained good results with return of arterial pulsations distal to the graft. Thrombosis of the graft occurred in one patient immediately following insertion and, as far as we know, he did not develop hypertension during the operative procedure.

Arterial Grafts

We have used various types of grafts in the abdominal aorta and peripheral arteries. Everyone agrees that, as yet, we do not have an ideal replacement graft for use in the arterial or venous systems. In general it is felt¹⁰ that arterial homografts function better than synthetic grafts or venous autografts when used as a by-pass graft in the extremities. Either an arterial homograft or a knitted Dacron® or Teflon® synthetic graft is preferred for replacement of segments of the aorta.

Summary

1. The problems associated with segmental arteriosclerotic peripheral arterial lesions are presented.

2. The management of 13 patients with abdominal aortic aneurysms is discussed. At the present time it is felt that all patients with aneurysms of the abdominal aorta and its branches should be excised and grafted unless the patient's general condition precludes a major operative procedure.

3. In general, many patients with thrombo-occlusive disease of the abdominal aorta and its branches can be managed by medical treatment. Selected patients can be benefited by arterial grafting and experience with arterial grafting in the Leriche syndrome and in atherosclerotic occlusion in the femoral arteries is reported.

Medical Arts Building

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BY-PASS OPERATION

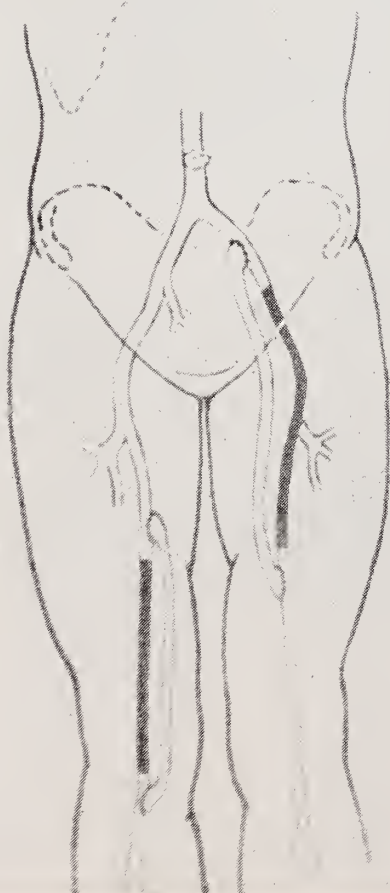


Figure 4: Technique of the by-pass operation.

THE PLACE OF CONVENTIONAL AND SUPERVOLTAGE THERAPY IN THE MANAGEMENT OF MALIGNANT DISEASE

Bryan L. Redd, Jr., M.D., *Atlanta*

THE SCIENCE OF medicine and its sub-specialties have benefited repeatedly by rather obscure discoveries in seemingly unrelated fields of science. An example of this was the discovery of a "new kind of ray" by the German physicist, Professor Wilhelm Conrad Roentgen, on November 8, 1895.

Historical Background

The fact that Roentgen used his hand to demonstrate the penetrability of X-rays possibly served to accelerate their adaptation to medical use.¹ That the new rays might have therapeutic application was cautiously mentioned in an editorial in the *Journal of the American Medical Association* in February, 1896. As early as April, 1896, many sources reported that roentgen rays would produce "changes in the skin which are very similar to the effects of sunburn."

In the early days roentgen rays were produced by the gas-filled unprotected Crookes tube activated by Ruhmkorff or Tesla coils or a static machine. In 1907 the Snook interrupterless transformer was developed.² Next came the development of the hot cathode tube by Dr. W. D. Coolidge in 1913, which was capable of consistent operation at voltages up to 150 kilovolts. Subsequent improvements included development of autotransformer control of the primary voltage, mechanical rectifiers, and valve tube rectifiers making possible the advancements from superficial roentgen therapy (50-130 kv) to medium roentgen therapy (150-180 kv), and to deep roentgen therapy (200-250 kv).

In the 1930's several X-ray generators operating in the supervoltage range (that is above 500kv) were placed in operation. These units included the large air insulated Van de Graaff electrostatic generator (1932), then the low frequency resonance transformer in a pressurized tank (1939). In 1940 the first orbital electronic accelerator (the betatron) was devised. These units are now commercially avail-

Great care must be exercised in the use of these valuable new adjuncts in the therapy of neoplasia.

able operating up to 31 mev. And now the synchrotron capable of generating roentgen rays with energies of 100 to 300 mev. and higher are being constructed. As a by-product of atomic research we have several artificial radioactive isotopes which emit gamma rays in the supervoltage energy range.

Clinical Experience

Several of the early pioneers in this field claim priority for the earliest use of roentgen rays in therapy. Grubbe of Chicago immediately began duplicating Roentgen's experiments following their announcement, and in a short time developed a painful third degree reaction on his left hand. A physician caring for this injury suggested the use of these rays in the treatment of a patient suffering from an ulcerated post-operative recurrent carcinoma of the breast. Grubbe treated a number of benign and malignant conditions shortly thereafter.¹

Dr. Francis H. Williams of Boston reported the successful treatment of carcinoma of the lip and is believed to be the first to enclose his treatment tube and use limiting diaphragms and aluminum filters.²

Freund of Vienna in 1897 reported epilation of a large hairy nevus.¹

Due to lack of knowledge relative to protection, a number of serious reactions occurred. The first, second, and third degrees of skin reaction were described and soon the late sequela of atrophy, telangiectasia, hyperkeratosis, fissures, ulcerations, and ultimately carcinomatous degeneration were reported. The histologic effects on the skin were described in 1897 by Kibbe and Gilchrist.¹ In 1903

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aspermia was experimentally produced without injury to the skin by Albers-Schonberg. Bergonie and Tribondeau in 1904 established the chain of histologic effects and formulated the law which states, "Immature cells and cells in an active stage of division are more sensitive to radiation than are cells which have already acquired their adult morphological and physiologic characters."¹

Prolonged Exposure

During the early days radiation treatments were given in one exposure sometimes requiring several hours. This treatment resulted in improvement in some cases, but failure occurred in many more. The failures were believed to be due to insufficient treatment and the tendency was to apply even larger quantities of irradiation. These prolonged exposures resulted in unpleasant and dangerous systemic reactions such as nausea, hemorrhage, and severe local destruction of the skin. Treatments were then divided and given over a period of four to six days. This modification reduced the systemic reaction but resulted in very severe skin damage.²

It then became evident that the quality of the radiation or its penetrating powers, which determined the distribution of the absorbed energy within the tissues and the manner in which the treatment was fractionated were very important factors influencing clinical results.

Biological and clinical experiments conducted by Regaud, Coutard, and others were influential in the development of many of the present day therapy techniques.³

At the present time probably over three quarters of the clinical irradiation therapy is conducted by the general radiologist using conventional deep therapy equipment.

The patients referred to the radiologist for irradiation therapy fall into one of two categories. One, those patients with primary malignant disease referred for curative therapy. This group constitutes approximately 25 per cent of the patients seen in the average X-ray therapy department. Two, those patients with advanced or recurrent malignant disease referred for palliative therapy only.

The purpose of therapy in the first group of patients is to completely eradicate the disease process without producing irreversible or incapacitating sequela so that the patient may live to a normal life expectancy. In the second group of patients the objective of therapy is to relieve symptoms, restore the patient to a near normal status if possible, and to prolong the patient's life expectancy longer than in

those individuals with the same disease process receiving no form of therapy.

Progressive Improvement

On reviewing the clinical results of the types of malignant lesions more frequently treated by roentgen therapy, it is noted that there has been progressive improvement during the past 30 years.^{4,5,6,7,8} Some of the factors responsible for this improvement has been the development of accurate methods of measurement of the roentgen dosage and the development of isodose curves which permit accurate plotting of the dose in the treated volumes of tissue. The accumulation of years of clinical experience has contributed immeasurably to these accomplishments.

With the use of conventional or orthovoltage X-ray therapy equipment the skin tolerance is the limiting factor in the treatment of deep seated lesions. To deliver cancericidal doses requires the use of multiple fields to avoid irreversible damage to the skin. Many techniques were utilized in an attempt to increase the depth dose without damage to the overlying skin. Rotation therapy first described by Pohl in 1906¹ is the equivalent of innumerable fields about the body surface thus producing a maximum depth dose with minimal dose to a unit area of skin. Convergent and pendulum therapy are variations of the same principle. These techniques require construction of rotating platforms or special tube suspensions. In 1909 Kohler⁹ first described the principle of irradiating through multiple small areas instead of one large portal. This technique now referred to as grid or sieve therapy has been restudied during the past decade.

During the early development of irradiation therapy it was noted that the number of clinical improvements increased as the quality of radiation was made more penetrating. Consequently, with the advancements in electrical engineering, treatment voltages were gradually increased from 200 kv to 400 kv, 800 kv and higher.²

As voltages increase the roentgen rays become shorter in wave length, are more penetrating, the scattered irradiation is more in a forward direction, and there is less differential of absorption between bone and soft tissues.

Because of the forward scattering of secondary electrons there is less skin reaction and sharper delineation of the margins of the treatment area thus reducing the integral dose.

These physical characteristics permit the delivery of greater quantities of irradiation to the deep structures of the body with minimum skin reaction and reduction in systemic effects.

In those large therapy centers having superficial, ortho, and supervoltage irradiation equipment avail-

able the proportion of the patients treated by supervoltage ranges from 30 per cent¹⁰ to 85 per cent¹¹ depending upon the philosophy of the therapist in charge. In those departments having rotational equipment and supervoltage therapy units available, rotational techniques were utilized in six per cent¹² to 36 per cent¹³ of patients treated by supervoltage techniques.

The evaluation of various forms of treatment depends upon the analysis of the results in comparable groups of patients which are large enough that statistical appraisal of the results is significant. Supervoltage roentgen therapy equipment has been in use for over 20 years. This modality of therapy has proved disappointing to many because the results have not paralleled the increase in kilovoltage.³

It has been estimated by some of the therapists having 15 to 20 years of clinical experience with supervoltage irradiation that the increase in cure rate with this mode of therapy is approximately 10 per cent in certain specialized lesions rather than a broad increase of 10 per cent in all lesions treated.^{14,10,11} Other therapists believe that there will be only very little improvement in survival rate.^{15,6,7,8} However, other factors must be taken into consideration. These include less discomfort to the patient both constitutionally and locally and often simplification of therapy techniques.⁷

With supervoltage irradiation the skin reaction is

no longer a limiting factor, therefore there was a tendency to give very high doses to the treated areas in an attempt to improve the treatment results. With the use of very intensive irradiation, damage to many normal structures has occurred.^{15,16} These include the stomach, small intestine, colon, spinal cord, and in some cases, the development of extensive subcutaneous fibrosis. It is reported that the incidence of bone necrosis is not appreciably less than that encountered with 250 kv irradiation.¹¹ Great care must be exercised in the use of this modality of irradiation therapy.

Table I lists the relative frequency of the major forms of cancer as found in the 10 City Survey conducted by the Public Health Department in 1947.¹⁷ Also illustrated is the frequency with which irradiation is used in the treatment of these types of neoplasms at the Emory University Clinic during the past several years.

Tables 2 and 3 list some of the relative merits of 250 kv and supervoltage radiation therapy equipment.

A complete statistical evaluation of treatment results with these modalities will require accurate allocation of patients into various treatment programs. This type of program can be conducted only at very large treatment centers and will require many years to accumulate sufficient numbers and to observe clinical results. Dr. Fletcher of the M. D. Anderson

TABLE I

Site	Relative Frequency ¹	Radiation Only ²	Radiation and Other Treatment ²
1—Skin	12.3%	44%	6%
2—Breast	11.2%	22%	30%
3—Cervix	9.45%	84%	5%
4—Intestine	8.2%		32%
5—Stomach	8.1%		43%
6—Rectum	5.45%		30%
7—Lung	5.35%	45%	27%
8—Prostate	5.0%		50%
9—Oral Cavity	4.72%	48.5%	11.5%
10—Bladder	3.8%		68%
11—Lymphoma	2.75%	72%	12%
12—Leukemia	2.25%		14%
13—Pancreas	2.25%		
14—Esophagus	1.55%	59%	18%
15—Brain	1.4%	41%	11%
16—Kidney	1.28%		77%
17—Larynx	1.18%	54%	5%
18—Testicle	.67%		87%
19—Bone	.64%	47%	13%
20—Other sites	8.3%		

¹From 10 City Surveys by Public Health Department, 1947. Heller et al.
²Proportion of patients in which irradiation is used at some time during their management at Emory University Clinic.

TABLE II
SUPERVOLTAGE RADIATION THERAPY

Advantages
1. Minimal to no skin reaction.
2. High depth dose permits simplified field arrangements.
3. High radiation output reduces treatment time.
4. Low differentiation of absorption between bone and soft tissues reduces risk of necrosis.
5. Decreased systemic effects during treatment.
6. Increased survival rate (10-15%) in certain lesions.
Disadvantages
1. Initial cost of equipment is high.
2. Protection of treatment area is costly.
3. Highly trained personnel often needed to maintain equipment.
4. Cost of repairs high.
5. Increased depth dose may result in damage to normal structures.
6. Clinical techniques still in transition.
7. Protection of sensitive tissue difficult.
8. Limited maneuverability of therapy unit.
9. Variation of field size may be limited (cones).

Conventional & Supervoltage Therapy / Redd

Hospital has an example of this type of program underway.¹²

TABLE III
250 KV ROENTGEN THERAPY

Advantages
1. Initial cost of unit is less.
2. Protection of treatment area is simple.
3. Maneuverability of therapy unit is good.
4. Variations in field sizes unlimited.
5. Protection of sensitive structure is easy.
6. Maintenance cost is low.
7. Roentgen output is moderate.
8. Prolonged clinical trial has confirmed many techniques.
9. Variability of quality of irradiation.
Disadvantages
1. Skin reaction with high doses undesirable.
2. More frequent systemic effect from therapy.
3. Low depth dose requires multiple field techniques.
4. High differential of absorption between bone and soft tissues.
5. Roentgen output varies with changes in line voltage.

At the present, comparisons of clinical results of various institutions using these different modalities of therapy are not accurate because of variations in case material, discrepancies in staging of disease, selection of patient treated, and other factors.

Most authors report that patients tolerate supervoltage radiation therapy better due to minimal skin reaction and decrease systemic effects. The initial tumor response is recorded as encouraging.^{11, 13, 18} However, it appears that optimum results are being approached due to increased accuracy of dosage measurements and the use of supervoltage radiation. Future improvements in clinical results will depend upon discoveries from research conducted in the field of radiation biology.¹⁹ The next step will require the development of a chemical or enzymatic agent which increases the radiosensitivity of the neoplastic cell with no resulting change in sensitivity of normal tissues, or an agent which increases the resistance of normal tissues without affecting the sensitivity of neoplastic tissues. Much work is required before this goal can be reached.

Emory University Clinic

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FILM EXPOSES FOOD QUACKERY

A NEW FILM "The Medicine Man," which dramatized the fight against quackery in the food and nutrition field, is now available for television showings sponsored by local medical societies.

Produced by the American Medical Association, the 27-minute film exposes the traveling health lecturers who use misinformation about nutrition to promote questionable products, and the door-to-door salesmen who misrepresent the value of nutritional products. The film also shows how the medical profession cooperates with the Food and Drug Administration and the Better Business Bureau.

J. M. A. GEORGIA

MODERN CONCEPTS OF DIABETIC RETINOPATHY

P. Thomas Manchester, Jr., M.D., *Atlanta*

Recent claims for the therapy of this serious complication are objectively appraised.

IN THE PAST fifteen years we have come to recognize the fact that a reliable diagnosis of diabetes mellitus can be made from the ophthalmoscopic picture alone. Before that time there was confusion between the retinopathies of diabetes, arteriosclerosis, hypertension, and nephritis.

It had been long appreciated that the so-called "retinal hemorrhages" of diabetes were smaller and more rounded than the flame shaped hemorrhages of hypertension. This was interpreted as being due to the fact that diabetic hemorrhages were deeper in the retina and, therefore, more confined and circumscribed. Fundus photographs, taken at intervals, revealed that these "hemorrhages" in diabetes did not change from month to month, although ordinary retinal hemorrhages were usually absorbed within a few weeks. Ballantyne, Loewenstein,¹ and Friedenwald² showed that these round, red "hemorrhages" were actually small capillary aneurysms and not free hemorrhages at all. This discovery was actually made and reported 80 years ago by MacKenzie and Nettleship,³ but their report was overlooked.

According to Friedenwald, there is no doubt that atherosclerosis is responsible for the high incidence of coronary occlusion, gangrene, and cerebral vascular accidents in the diabetic. There is, however, no direct relation between the retinopathy and the atherosclerosis. Even serial sections of the arterial tree in diabetic retinopathy reveal no evidence of atherosclerosis.

The two specific vascular changes associated with diabetes mellitus at autopsy are glomerular nodules in the kidneys and saccular aneurysms in the retinae. These two lesions may be one and the same. At least they are similar in many respects.

These microaneurysms are most abundant in the macular area and predominate on the venous side of the capillaries. They are small, spherical, and dark red in color. Their size varies from 20 to 100 μ m. in diameter. Only the larger ones are visible with the ophthalmoscope. They may dominate the fundus picture, in which case they are almost pathognomonic of diabetes mellitus. (Figure 1).

The rare microaneurysms associated with hypertensive retinopathy, choroiditis, venous occlusion, and pernicious anemia are always few in number and difficult to find.

We need not forget the old familiar ophthalmoscopic changes of advanced diabetic retinopathy. (Figure 2). The larger hemorrhages are round because they are deep within the retina. The hard, yellowish exudates, which are so sharply delineated, contrast with the cotton wool exudates of hypertension and the collagen diseases. Other fundus findings with diabetes mellitus are irregular dilatation of the retinal veins (sometimes to such an extent that they resemble sausage links) and retinitis proliferans (Figure 3), the result of repeated vitreous hemorrhages which have become organized. Thrombosis of the central retinal vein occurs sometimes. (Figure 4). Massive vitreous hemorrhage may occur in patients who have very little retinopathy (Figure 5). Gwiner⁴ has called attention to the role of hypoglycemic reactions in producing these hemorrhages. He advised that the blood sugar must be maintained at a normal level or above. In patients with

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From the Department of Ophthalmology, Emory University School of Medicine, and the Grady Clay Memorial Eye Clinic, Grady Memorial Hospital, Atlanta.

DIABETIC RETINOPATHY / Manchester

so-called "brittle diabetes" a blood sugar of 140 is much less of a danger than a blood sugar of 60 mg.

Duration of the diabetes, rather than its severity, is the most important factor in development of retinal lesions (as is the case with kidney lesions). Wagner⁵ found that when the diabetes had been present over 20 years, 83 per cent of diabetics had retinopathy.

It is now agreed by most ophthalmologists that regulating the diabetes is very important in patients whose vision is deteriorating because of diabetes.

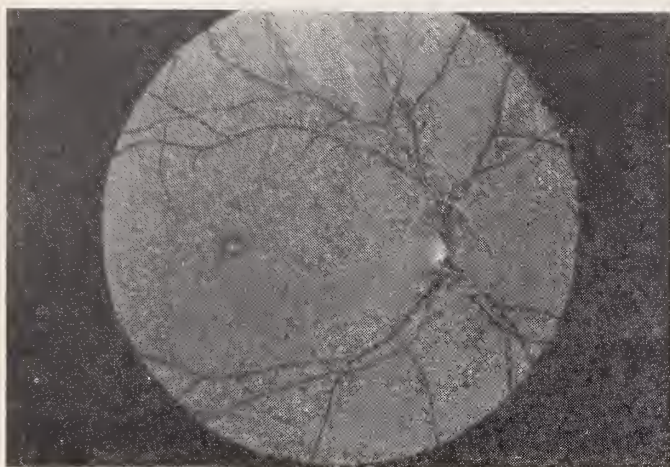


Figure 1: Micoaneurysms in the fundus.

The patient must be carefully followed. A few years ago both the ophthalmologists and the internists had an extremely pessimistic and fatalistic attitude about controlling the diabetics with retinopathy, feeling that the ocular disease progressed inexorably regardless of the level of blood sugar. It is true today that many patients will go blind from diabetes despite the most attentive professional care, but on the whole the retinal damage will be less severe, develop more slowly, and remissions will be more frequent if the patient is a well controlled diabetic, rather than a poorly controlled one.

The Kimmelstiel Wilson syndrome was diagnosed only at autopsy a few years ago, but today it may be identified by clinical signs. The presence of marked albuminuria and advanced diabetic retinopathy are usually diagnostic. Frequently associated signs are edema, hypertension, and renal insufficiency.

There is much evidence indicating that the basic retinal lesion of the microaneurysm and the intercapillary glomerulosclerosis are essentially one and the same, differing in minor respects because of their different anatomical locations. At autopsy the kidney lesions are never found in the absence of retinal changes. They both are of similar size and are

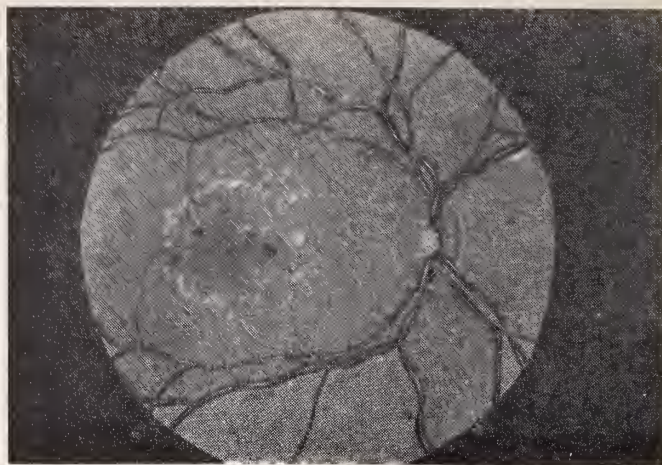


Figure 2: Typical Diabetic Retinopathy.

both associated with capillaries. The final stage of both is a hyalinized nodule consisting of a complex polysaccharide. Volk⁶ disputes this point but his arguments are not convincing.

Lesions resembling microaneurysms located in the retina and in the glomeruli have been produced in experimental animals. This has been accomplished using A.C.T.H., Cortinsone,[®] Meticorten,[®] and Vitamin B-12 deficiency. Rich⁷ has found the typical Kimmelstiel lesions in the kidneys of non-diabetic

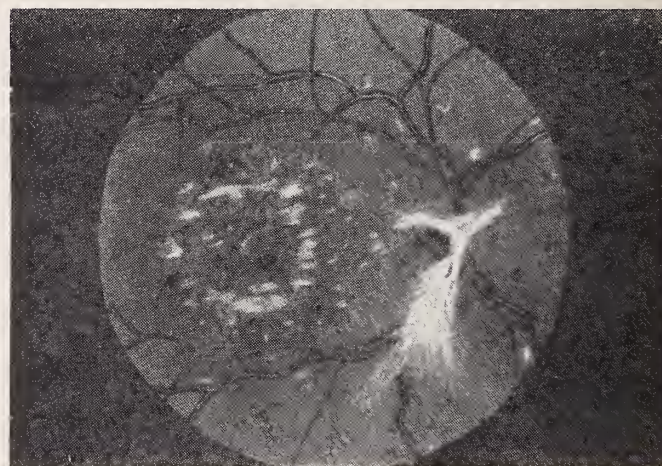


Figure 3: Retinitis Proliferans.

patients who had been subjected to long and intensive treatment with Corticotropin.[®]

Friedenwald and Naquin⁸ have seen retinal microaneurysms with the ophthalmoscope in patients treated with A.C.T.H.

It appears that in some way the retinal microaneurysms, as well as the Kimmelstiel kidney lesions, are perhaps caused by an adrenal cortical effect in some manner, potentiated by the diabetic state.

Diabetic retinopathy is made worse by pregnancy and also by the systemic administration of adrenal cortical steroids. Perhaps the mechanism of the adverse effect is the same in both instances.

The Houssay⁹ phenomenon in man has been re-

ported a number of times. Essentially it is the improvement of diabetes and diabetic retinopathy when patients develop pituitary insufficiency for one reason or another. The diabetogenic factor in the pituitary gland appears to play an important part in the development of diabetic retinopathy. Suppression of this factor allows cessation of the formation of microaneurysms in the retina. Hypophysectomy has been tried as treatment for patients whose retinopathy is hopelessly severe and is progressing toward blindness.

A logical question might be asked: Given a patient with diabetic retinopathy so severe and rapidly progressive that total blindness is inevitable, would one be justified in advising an hypophysectomy or adrenalectomy with the hope of halting the process?

Unfortunately, both adrenalectomy and hypophysectomy are formidable procedures with high mortality rates during the operative and immediate postoperative periods. There have been no convincing reports in the literature that these operations should be done for severe diabetic retinopathy. The likelihood is great that the patient would be made more unhealthy by the operation; and without any improvement in vision.

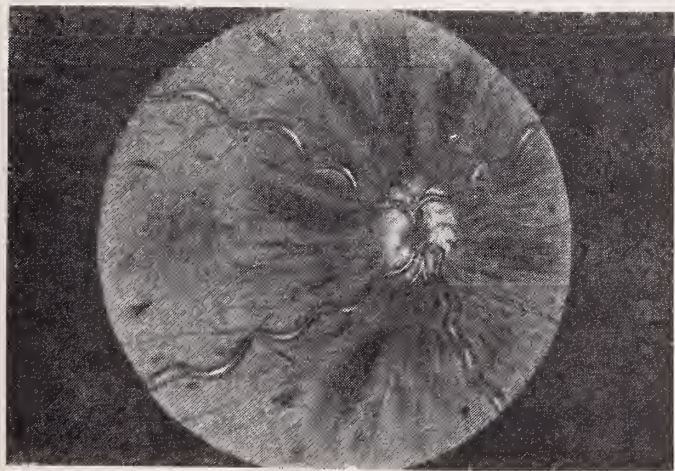


Figure 4: Thrombosis, Central Retinal Vein.

As for medical treatment of the retinopathy of diabetes, we honestly have no reliable method. There are several medicines which we may prescribe empirically on certain occasions. Since there may be generalized capillary fragility in the cases with retinal disease, this can be investigated by placing a blood pressure cuff above the elbow with a pressure of 100mg. holding for five minutes. If the retinopathy is progressing and the tourniquet test positive, the clinician is justified in trying the effects of ascorbic acid, Rutin®, or Indo-niacin®. The effects of such therapy will be difficult to evaluate because the retinal disease itself shows frequent exacerbations and remissions.

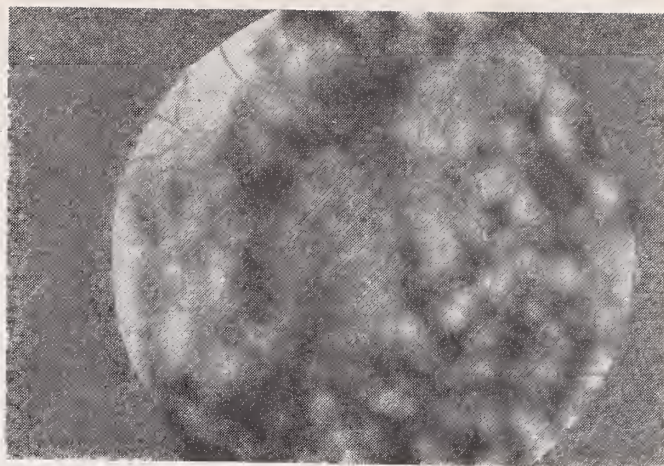


Figure 5: Vitreous Hemorrhage.

One medical means of suppressing the adrenal and pituitary secretion is the institution of androgens. Unfortunately, there have been no encouraging reports from the use of this means of therapy.

Becker¹⁰ and co-workers have found evidence that metabolism of Vitamin B-12 is abnormal in diabetics who develop retinopathy, whereas it is normal in diabetics whose eyes remain unaffected. Those with retinopathy are unable to retain the test dose of Vitamin B-12. 90 per cent of patients with diabetic neuropathy have retinopathy, and Vitamin B-12 is helpful in this disease. B-12 deficiency accentuates the kidney lesion of Cortisone® treated rabbits, but intensive B-12 therapy does not alter the clinical course of diabetic retinopathy.

Conclusion

In conclusion, we may agree that there is a characteristic retinal picture in diabetics which may be diagnostic. Control of the diabetes is very important in the treatment of patients with diabetic retinopathy.

478 Peachtree St.

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MULTIPLE HEMANGIOMAS OF THE JEJUNUM AS A CAUSE OF MASSIVE GASTROINTESTINAL BLEEDING

Albert L. Evans, M.D., Olin S. Cofer, M.D., and

Hugh H. Gregory, M.D., *Atlanta*

HEMANGIOMAS of the small intestine are rare tumors which may cause massive gastrointestinal bleeding. They will test the diagnostic astuteness of physicians when they are encountered. They are usually manifested by bleeding but can present themselves with obstruction, intussusception, inflammation, or a variety of vague gastrointestinal symptoms. Although these lesions are frequently considered, absolute diagnosis in many cases can only be made by exploratory laparotomy or autopsy. It is the purpose of this paper to report a case of multiple cavernous hemangiomas of the jejunum and to briefly discuss vascular tumors of the small intestine.

In a review of 51,261 surgical admissions over an 18 year period at the University of Pennsylvania Hospital, Hansen found 28 small intestinal tumors but no hemangiomas. Merchant found 24 benign tumors of the small intestine in 7,340 autopsies and 50,775 surgical specimens. 18 of these were found at autopsy and six at operation. Of the 24 tumors, three were hemangiomas. In 11,500 autopsies and 45,000 surgical specimens, Raiford found 88 tumors of the small intestine of which three were hemangiomas or 3.4 per cent of all tumors of the small intestine. The incidence might be higher, however, because many of these tumors remain silent and never bleed or cause symptoms.

The first recorded case of hemangioma of the

small intestine was published by Gascoyen in 1860. This patient had hemangiomas in the bowel wall, liver, parotid gland, and skin. Brown (1924), Kaijser (1937), Lazarus and Marks (1945), Gentry, et al (1949), have collected cases from the literature and added new cases.

Various classifications have been advocated but one of the most inclusive is that of Gentry, et al.

Benign Vascular Lesions

- A. Telangiectasis (hereditary and non hereditary types)
- B. Hemangioma
 - 1. Capillary hemangioma (simplex, mostly single)
 - 2. Mixed capillary and cavernous hemangioma
 - 3. Cavernous hemangioma
 - (a) Multiple phlebectasis (small cavernous)
 - (b) Simple polypoid (single cavernous)
 - (c) Diffuse expansive (single contiguous)
 - (d) Diffuse expansive (multiple contiguous)

Malignant Vascular Lesions

- (A) Hemangioendothelioma
- (B) "Benign metastasizing hemangioma"
- (C) Kaposi's sarcoma
- (D) Angiosarcoma

The origin of these lesions is still unsettled and the majority that have been reported have been be-

nign but their transitional forms and malignant counterparts are rarely seen.

The most common presenting symptom is gastrointestinal bleeding which may be manifested by dark altered blood or, if the bleeding is profuse, by bright red blood. The bleeding may be undetected at first and many patients have had repeated X-ray studies which have all been reported as negative and have been treated by repeated blood transfusions. A few cases have had intestinal obstruction or intussusception caused by the lesion and occasionally inflammation of the tumor may simulate appendicitis. There are some cases reported who complain of puzzling gastrointestinal symptoms which cannot be determined by diagnostic means.

The diagnosis of hemangiomas of the small intestine is rarely made preoperatively unless the tumor is large. In these cases, they have a characteristic X-ray appearance showing many phleboliths. Bockus has urged that physicians become "small bowel conscious" and consider lesions of the small bowel in differential diagnosis. Indeed, if a patient presents a history of repeated attacks of melena with marked anemia for which no cause can be found, hemangiona should be considered. The presence of other hemangiomas on the skin or mucous membranes should strengthen the suspicion. Gastrointestinal series, gastroscopy, sigmoidoscopy, and selective intubation by suction of intestinal contents at different levels in an effort to determine the site of bleeding are used in an attempt to make the diagnosis. Despite these aids, exploratory laparotomy must often be resorted to in order to uncover the lesions.

Gastric or duodenal ulceration, peptic ulceration in a Meckel's diverticulum, intestinal polyps, gastrointestinal malignancies, and blood dyscrasias must all be considered in the differential diagnosis. A differential point to be considered at time of operation is chronic congestion of the portal system which may produce saccular dilatations of subserosal or even submucosal veins.

Surgeons are asked today to treat more and more cases of gastrointestinal bleeding, particularly the massive type. Many emergency operations are being performed for this problem. In 75 to 90 per cent of cases the bleeding will be found to be due to peptic ulceration for which subtotal gastrectomy is the treatment of choice. In those cases in which a definite ulcer cannot be found, many advocate a "blind" gastric resection. Before this should be undertaken, the entire gastrointestinal tract should be minutely examined for other lesions. Hemangiomas should be searched for carefully, as they could be overlooked.

The treatment of vascular tumors of the small

intestine is primarily surgical. When obstruction, intussusception, or severe hemorrhage occur, an emergency procedure may be necessary. Good surgical care such as restoration of blood volume, replacement of fluid and electrolytes, and correction of anemia should be accomplished. Surgical treatment is usually successful when the lesion is single or few in number. When multiple tumors are present, the problem is more difficult as it may be impossible to determine the bleeding site. It would be impractical to excise too much of the small bowel but attempts should be made to excise the larger tumors by segmental resection of the bowel and perhaps the isolated lesions by multiple mural excisions. The prognosis is much poorer in this type of case. Palliative methods such as cauterization, Roentgen therapy, implantation of radon seeds, injection of sclerosing solutions, the use of moccasin venom, rutin, low residue high protein diet, and large doses of iron have been advocated for those individuals with lesions too extensive to resect.

Case Report

D. C., a white male, age 63 years, was admitted to the hospital July 3, 1957, complaining of epigastric discomfort and bleeding from the rectum. He stated that approximately two years prior to admission while at stool he passed large amounts of bright red blood through the rectum. He became so weak that he fainted. After that time, at about two month intervals, he had other similar episodes. He had been thoroughly worked up by several private physicians and at two university clinics and was told that all X-rays, sigmoidoscopic, and stool examinations were negative. He was advised to have an exploratory laparotomy but refused.

Eight months prior to admission he began to have constant epigastric pain of a burning nature which radiated under his ribs and sternum. He was treated for this with a bland diet and antacids with little relief. The pain had become progressively worse and was constant day and night. It had no relation to meals but was aggravated by deep breathing or stooping over. No nausea or vomiting was present at anytime.

Past History

D. C. was in good health until recent years. In 1952 he had a hemorrhoidectomy, a cholecystectomy 1953, and prostate resection in 1953.

Family History

This patient has no familial history of bleeding and had no bleeding himself until two years ago when he was 61 years old. Therefore, he could not be classified as a case of familial hereditary telangiectasis.

Physical Examination

The patient appeared somewhat pale and under-

MULTIPLE HEMANGIOMAS / Evans

nourished. He was lying quietly in bed in no acute distress but complained of epigastric discomfort and frequent belching. His temperature was 98.6, pulse, 80, and respiration, 20. Blood pressure was 170 systolic and 110 diastolic. His skin was warm and moist with numerous hemangiomas over the face and trunk. Lymphatics: no palpable nodes. Eyes: negative. Telangiectasia about nose and ears. Complete edenture. Mouth and pharynx were otherwise negative. Hemangioma on lip. Neck: negative. Thyroid not palpable. The thorax showed equal expansion with vesicular breath sounds and a resonant percussion note throughout. Heart: No cardiac enlargement. Heart sounds were of good quality. There were no murmurs. Abdomen: slightly above plane. Upper right rectus scar with diastasis but no hernia. There was tenderness in the right upper quadrant and epigastrium. No palpable masses or viscera. Peristalsis hyperactive. No hernia. Genitalia negative. Extremities: Small hemangioma on both upper extremities. Peripheral pulsations good. Blood vessels slightly sclerotic. Rectal: tarry stool.

Laboratory Findings

On admission, the total red count was 3,880,000 with 9.3 grams hemoglobin. Hematocrit was 35 per cent. The white count was 12,000 with differential of 70 per cent segmented cells, three per cent eosinophiles, 18 per cent lymphocytes, and nine per cent monocytes. The urine showed specific gravity 1.015, 30 milligrams of albumin, a rare, finely granular cast. The bleeding time was one minute 40 seconds and the clotting time was seven minutes 23 seconds. Prothrombin time was normal. The alkaline phosphatase was 4.8 King and Armstrong units. Bromsulfalein excretion two per cent retention in 45 minutes. Cephalin flocculation test was negative.

Other Examinations

Roentgenograms of the chest were negative. Barium enema revealed a somewhat smooth colon but no definite evidence of ulceration or malignancy. Upper gastrointestinal series was negative except for a small hiatus hernia with possible esophagitis and mild spasm in the prepyloric area of the stomach. Sigmoidoscopic examination was negative. A Miller Abbott tube was passed and suction at different levels carried out but no blood was withdrawn.

The patient was told that the cause of bleeding could not be located and was advised to have an exploratory laparotomy. On the fifth day after admission he had severe melena and consented to surgical exploration. Through a left paramedian incision, the abdominal cavity was entered. Exploration was started with the small bowel at the ileo-

cecal area and along the ileum small, 3 millimeter (match-head), bluish nodules in the bowel wall were noted. As the jejunum was approached these became more numerous. The proximal jejunum was found to be studded with numerous bluish nodules varying in size from 3 millimeters to 16 millimeters (match-head to size of a dime). Examination of the stomach, liver, colon, and other abdominal viscera failed to reveal further tumors. There was a small hiatal hernia. Since the entire small bowel was involved, it was decided to resect only the proximal jejunum hoping that the bleeding had arisen from the larger tumors. Therefore, the proximal 90 centimeters of jejunum beginning three centimeters distal to the ligament of Treitz was resected. An end to end jejuno-jejunostomy was done. The post-operative course was uneventful and the patient



FIGURE 1: Jejunum showing multiple hemangiomas.

was discharged on the eighth post-operative day with a guarded prognosis.

The pathological report stated: "The specimen consists of 90 centimeters of jejunum with numerous bluish nodules which, on cut section, are bluish, spongy areas containing clots of blood. The background is that of cavernous hemangiomata in the

submucosa. The cavernous sinuses show definite evidence of rupturing with focal thrombosis and local ulceration of the mucosa overlying the areas of thrombosis. There is no evidence of malignancy." (Figure I).

After his dismissal from the hospital, the patient was placed on rutin, low residue diet, and iron therapy. However, since his operation he has had two further bleeding episodes requiring hospitalization for blood replacement. It is apparent that further exploration with critical examination of the entire gastrointestinal tract will be necessary. Since resection of the entire small bowel cannot be done, it is hoped that another look might uncover the chief area of bleeding or multiple mural excisions could be considered. It is in this type of case with multiple hemangiomas that the treatment becomes complex and the prognosis poor.

Summary

1. Hemangiomas of the small intestine are rare.
2. Hemangiomas of the small intestine may manifest themselves by gastrointestinal bleeding, obstruction, inflammation, or vague abdominal symptoms.
3. Large hemangiomas may be diagnosed preoperatively by characteristic phleboliths in Roentgenogram.
4. The diagnosis is usually made by exploratory laparotomy or autopsy.
5. Repeated melena with unexplained anemia or

numerous hemangiomas of skin should arouse suspicion of intestinal hemangioma.

6. Hemangiomas should be considered before doing a "blind" gastric resection.

7. The treatment is surgical; results are excellent in single lesions; poorer in multiple lesions.

8. A case of multiple cavernous hemangiomas of the jejunum in a 63 year old male is reported.

735 Piedmont Ave., N.E.

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USE OF DOCTORS DOUBLES IN 30 YEARS

AMERICANS NOW SEE PHYSICIANS almost twice as often, on the average, as they did 30 years ago, Health Information Foundation reported.

In its monthly statistical bulletin, *Progress in Health Services*, the Foundation analyzed figures for out-of-hospital doctor visits from three separate surveys: one covering the 1928-31 period and two conducted within the last three years.

Three decades ago, the Foundation stated, Americans made an average of 2.6 visits a year to physicians. The current average is almost five visits a year.

Part of the increase can be explained by the fact that a higher proportion of people now see their doctor at least once a year. Less than half the population in 1928-31 saw a physician during the course of a year. Currently only about one person

in three fails to do so. Even when only users of doctors' services are considered, the average number of visits per person has increased in the last 30 years.

Women tend to see physicians more often than men do, especially during the young-adult period, the Foundation said. By age, the lowest average use comes from five to 14. The highest usage is among persons 65 and over.

"Today," the Foundation pointed out, "there is little difference in the volume of medical care received by people in widely separated income groups." In 1928-31, adults in high-income families averaged about half again as many visits as those with the lowest incomes. Currently the comparable advantage of high-income families is much less—only about one-eighth.

With prolonged administration of therapeutic doses of this new drug, acidosis and resistance to the diuretic actions do not develop.

THE USE OF A NEW ORAL SALURETIC AGENT IN MANAGEMENT OF OBSTETRICAL AND GYNECOLOGIC DISORDERS

THE DISTURBANCE IN physiology which is responsible for sodium and water retention during the premenstruum and during pregnancy is not clearly understood. The entire clinical syndrome of premenstrual tension with edema has been attributed to abnormal sodium retention by various tissues of the body under the influence of the ovarian steroids.¹ The Biskinds^{2,3} have maintained that premenstrual tension and edema are encountered in patients who have vitamin B deficiency which leads to impairment of liver function so that complex estrogens like estradiol are not completely inactivated. In 1931 the observations of Frank⁴ suggested a high renal threshold for estrogenic substances as a cause of premenstrual molimina. Israel disagreed and suggested that these symptoms were not due to an increase in circulating estrogens, but rather to the presence of unantagonized estrogen associated with inadequate progesterone production.⁵ Hence, the problem of etiology of premenstrual tension and edema is not new, nor is it solved. The edema is still with us and in spite of the valued use of B-complex, sedation, progesterone, and ethisterone therapy, the problem of edema, often a very disturbing symptom, is still best approached through diuretic therapy.

The exact mechanism which produces edema in pregnancy is not known. Since metabolism of increased amounts of steroid hormones is present in both the premenstruum and pregnancy, it might be assumed that some metabolic stress or defect common to both conditions plays a role in production of the edema. The studies of Dieckmann⁶ have shown that elimination of water and sodium (both

William E. Barfield, M.D.,
Edwin C. Jungck, M.D., and
Robert B. Greenblatt, M.D., Augusta

injected and ingested) is delayed in all pregnant women, and to a greater degree in patients with toxemia. A consistent elevation in the excretion of the adrenocortical steroids concerned with sodium retention has been demonstrated in patients with toxemia of pregnancy.⁷

Rapid weight gain in late pregnancy suggests impending toxemia, hence it would appear that sodium retention must be in some way involved in the pathogenesis of toxemia. That the early detection and adequate control of rapid excessive weight gain due to edema in pregnancy is a first line of defense against the development of toxemia is an accepted belief. It would follow that rational therapy for edema of pregnancy should include a sodium diuretic. The relative effectiveness of various diuretics in pregnancy has recently been studied by several investigators.⁸⁻¹²

According to Bayliss,¹³ an ideal diuretic should have the following properties:

- (1) it should be effective by mouth
- (2) it should be at least as potent as other diuretics currently available
- (3) it should induce a diuresis of water, sodium, and chloride in such proportions that their relationship in the extracellular fluid remains unaltered
- (4) it should not cause any electrolyte imbalance

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From the Department of Endocrinology, Medical College of Georgia, Augusta.

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(5) it should act rapidly, enabling patients to respond initially without becoming refractory later, and, if necessary, continuous administration should allow the seriously incapacitated patient to have a diet containing a palatable amount of sodium chloride

(6) it must be devoid of toxic effects

Consideration of the mechanism of action of some of the currently available diuretics leaves much to be desired in view of these criteria:

(1) *Water*—Increased water intake is followed by increased output of water, but excretion of sodium is frequently diminished.¹⁴

(2) *Sodium Sulphate*—Acts as a diuretic by reducing reabsorption of fluid by the tubules. The epithelial cells are relatively impermeable to sulphate which increases the osmotic pressure of the fluid within the lumen of the tubules. The work demanded for the reabsorption of the usual quantity of fluid exceeds the capacity of the tubular epithelium.¹⁴

(3) *Ammonium Chloride and Urea*—Ammonium salts are reconstituted in the body into urea and have a diuretic action similar to that of the sulphates.¹⁴ When edema associated with pregnancy is small in amount, ammonium chloride is an excellent diuretic. When edema is of some magnitude, necessitating the mobilization of significant amounts of sodium, a satisfactory diuresis seldom follows administration of ammonium chloride. Our experience is in accord with that of Finnerty¹⁵ and Assali¹⁶ who found that toxemic women show a decreased sensitivity to ammonium chloride.

(4) *Caffeine*—Exerts its diuretic action by renal vasodilatation, without any specific increase in sodium excretion.¹⁴

(5) *Mercurial Diuretics*—The effectiveness of mercurial preparations in both oral and parenteral administration in the mobilization of sodium and water in cardiac disease has been appreciated. Well controlled clinical studies indicate the effectiveness of mercurial diuretics in management of the edema of premenstrual tension and pre-eclampsia.¹⁷ Finnerty¹⁵ believes that when mercurials are used in toxemia they usually produce diuresis that is unsatisfactory and that is seldom comparable to that produced in congestive heart failure. He feels that in view of recent renal biopsy studies¹⁸ which show that the characteristic renal lesion of toxemia resembles that of nephritis, these agents should be contraindicated in toxemia because they produce their diuretic effect by direct toxic action on the renal tubule. Moody,¹⁹ on the other hand, feels that fear of renal damage is apparently baseless, and believes that "Even with kidney involvement, the continuous use of a mercurial diuretic for a short period should not be dangerous. It is the intra-

cellular edema which damages the kidney, not the diuretic."¹¹

(6) *Carbonic Anhydrase Inhibitors* (acetazolamide, ethoxzolamide)—Produce their diuretic effect by inhibiting sodium reabsorption from the renal tubules, and have found distinct clinical application in treatment of mild edema of various causes. According to Moyer⁸ a daily dose greater than 250 mg. fails to increase the diuresis. He further states that these preparations lose their effectiveness after two or three days and can be used effectively only when an interrupted dosage regimen is feasible. These drugs have been very useful in the management of premenstrual edema where the course of therapy is limited to five to eight days, but should be administered in intermittent courses in prolonged indications such as edema of pregnancy. Acidosis due to renal failure is a definite contraindication to the use of carbonic anhydrase inhibitors. Such patients fail to respond to the diuretic and the effect on the carbonic anhydrase systems throughout the body accentuates the acidosis.⁸

(7) *Chlorothiazide*—This is a unique compound which has been introduced recently for oral use as a diuretic. Because of the following properties it has been shown to be an effective and superior saluretic agent in control of edema of varied etiology.¹³ It appears to be almost devoid of toxic effects and exhibits many of the features of the ideal diuretic. With effective diuretic doses (500 to 1000 mgm. orally) the increased rate of sodium excretion is nearly balanced by the excretion of chloride, and little change from the normal rate of excretion of bicarbonate or potassium occurs. Since therapeutic doses of chlorothiazide do not appreciably increase bicarbonate excretion, acidosis and resistance to the diuretic do not develop on continued administration. Published studies⁸ suggest that when the potency of chlorothiazide is compared with that of other diuretics it is seen that a dose of meralluride equivalent to 40 mgm. of mercury (1 cc.) parenterally, produces an increase in sodium excretion equal to that brought about by 1,100 mgm. of chlorothiazide given orally. Similarly, 700 mgm. of chlorothiazide is shown to be equal in effect to four tablets (40 mgm. of mercury) of chlormerodrin administered orally. The recommended daily dose (1000 mgm.) of chlorothiazide was found to be at least twice as natriuretic as the maximally effective dose of acetazolamide. When patients are not in intractable or terminal heart failure the dietary intake of sodium may be liberalized with administration of chlorothiazide. In toxemia of pregnancy, Finnerty¹⁵ frequently noted a striking fall in arterial blood pressure. It would seem from these observations that the hypertension in toxemia of

ORAL SALURETIC AGENT / Barfield

pregnancy is directly related to the sodium retention and edema since in hypertensive patients (other than toxemia) little or no antihypertensive action results from chlorothiazide therapy alone. Chlorothiazide, however, has been shown to markedly potentiate the effect of antihypertensive agents which block sympathetic activity.⁸ Ford²⁰ has shown that an oral dose of chlorothiazide has rapid onset of action (two hours) and a short duration of effect (12 hours). Because of the unusual and desirable properties of this new saluretic agent the present clinical study was undertaken to determine the effectiveness of chlorothiazide in control of edema in pregnancy, premenstrual tension, mastodynia, and other gynecological conditions with associated edema.

Methods and Materials

Forty-seven consecutive patients with excessive weight gain and edema during the last half of pregnancy and 72 unselected patients with edema associated with gynecological disorders were studied.

All of the obstetrical patients were normotensive and there was none with toxemia of pregnancy. Chlorothiazide was the sole therapeutic agent except for routine prenatal supplements of multivitamins and minerals. No strict limitation of dietary sodium was advocated. Obstetrical patients were examined at monthly intervals until the eighth month (32nd week) and at weekly intervals during the last eight weeks. General obstetrical examination included blood pressure reading, complete urinalysis, and recording of weight at each visit. Early in the course of this study chlorothiazide was administered in 250 mgm. doses once or twice daily and it immediately became apparent that a larger dose was more effective. (Table 1). Although a few patients responded with excellent diuresis and rapid

weight loss to a dose of 250 mgm. twice daily, it was apparent that 1000 mgm. (500 mgm. twice daily) was the average effective dose and this dose was used throughout the remainder of the study. Three patients in the eighth month of pregnancy required 1500 mgm. (500 mgm. t.i.d.) for maximal effect and complete disappearance of demonstrable edema. Therapy was begun in most instances at about six months and was continued without interruption to the time of delivery with the exception of four patients in whom untoward effects of therapy such as nausea, weakness, dizziness, and tingling of the hands and fingers, required discontinuation of therapy. In each of these patients the described symptoms disappeared when the drug was discontinued and reoccurred upon readministration of the drug one week later.

The 72 patients with edema associated with gynecological disorders received a daily dose of 500 mg. to 1500 mg. of chlorothiazide in varying dosage of 500 mgm. from one to three times daily. The conditions in which response to edema was evaluated included premenstrual molimina (with separate evaluation of response of edema, headache, tension, and mastodynia), virginal breast hypertrophy with mastodynia (evaluation of relief of pain), edema associated with menopausal symptoms, and obesity (as an aid to weight loss). An attempt to determine the minimal effective dosage from the standpoint of clinical evaluation of weight loss and disappearance of demonstrable edema soon indicated that 1000 mgm. daily was the optimal dose. In this group the 12 patients who were unable to tolerate the drug in the usual 1000 mgm. daily dose demonstrated the same intolerance to smaller doses (250 mgm).

Results Obstetrical Patients

The majority of the obstetrical patients were in the sixth to the eighth (lunar) month of gestation when diuretic therapy was instituted. Initial dose was usually 250 mgm. twice daily. We learned from patient experience that when the drug was taken before breakfast and not later than 3:00 P.M. the disturbing frequency of nocturia was usually eliminated. All 47 patients, including the four with poor tolerance to the drug, demonstrated adequate diuretic response to chlorothiazide. Response was considered adequate when rapid weight loss was accompanied by clinical absence of edema as demonstrated by sustained pretibial pressure as well as subjective observations. Of the 47 patients observed, 14 responded satisfactorily to a daily dose of 500 mgm.; 30 responded satisfactorily to 1,000 mgm.; and three required 1,500 mgm. for maximal desired response. (Table 2). There was a usual weight loss of two to six pounds.

TABLE 1
CHLOROTHIAZIDE
DOSAGE EFFECTIVENESS—DIURESIS

	Excellent	Satisfactory	Unsatisfactory*
Premenstrual (and other) Edema			
.250 Gm.	—	—	—
.500	19	7	3
1.000	32	12	2
1.500	1	—	1
Edema of late Pregnancy			
.250 Gm.	—	—	2
.500	10	4	14
1.000	19	11	—
1.500	3	—	—

*Larger doses were administered to patients who failed to respond to initial dose.

within the first 24 hours of therapy, and in most instances demonstrable edema failed to reappear so long as daily therapy was continued. Many patients after the first month of chlorothiazide therapy weighed the same as after initial loss of edema, then in subsequent weeks showed weight gain compatible with normal pregnancy. Duration of continuous therapy was from four to 12 weeks with the exception of one patient to whom therapy was given for 20 weeks (1,000 mgm. daily). In no patient did the drug become ineffective during prolonged daily administration. This conclusion was based on the failure of recurrence of edema in any patient who took the medication regularly and, with few exceptions, the consistent return of obvious edema within 24 hours after patients discontinued the medication. In every instance the response was immediate and satisfactory when chlorothiazide therapy was resumed. Although reduction in blood pressure has been observed in patients with toxemia of pregnancy,¹⁵ no effect on the blood pressure was noted in this series of normotensive, non-toxic patients treated with chlorothiazide for edema in the last half of pregnancy. It was interesting to note that none of the patients in this study developed toxemia.

TABLE 2
CHLOROTHIAZIDE
EFFECTIVE DIURETIC DOSE

	Daily Dose (Gm.)	No. of Patients
Premenstrual (and other) Edema		
	.500	26
	1.000	44
	1.500	1
Edema of late Pregnancy		
	.500	14
	1.000	30
	1.500	3

Four of the 47 pregnant patients discontinued medication because of undesirable effects of therapy. All four, however, demonstrated loss of edema and weight loss during the initial three or four days of therapy. Untoward symptoms included nausea, weakness, and drowsiness in one patient, fainting in one patient, numbness and tingling of the hands and fingers in one patient, and "indigestion," dizziness, and dyspnea in one patient. No change in blood pressure was observed in these patients with untoward symptoms. Symptoms disappeared (and edema returned) the day after chlorothiazide was discontinued in all four patients. A second trial of medication resulted in recurrence of symptoms. All four of these patients tolerated acetazolamide satis-

factorily, but volunteered that the maximal effective dose (250 mgm. twice daily) did not control the edema as completely as chlorothiazide.

Use of Chlorothiazide in Various Gynecological Disorders with Edema

The clinical response to oral administration of chlorothiazide 1,000 mgm. daily in divided doses of 500 mgm. each is outlined in Table 4.

Fifty of the 72 patients studied presented symptoms of premenstrual molimina. All eight of these patients who complained of severe mastodynia during the premenstrual week were more or less completely relieved of breast pain by the administration of 500 mgm. chlorothiazide daily during the last 10 days of the cycle.

Most of the 50 patients who complained of undesirable premenstrual symptoms had multiple complaints, for instance, premenstrual tension and edema, or edema and headache. Because of this, the premenstrual tension syndrome was broken down into component parts for separate evaluation of the response of individual symptoms to chlorothiazide therapy. All 32 patients who complained of premenstrual edema had a satisfactory diuretic response to chlorothiazide therapy (500 mgm. b.i.d.) with prevention or disappearance of edema during the last 10 days of the cycle. Of the 34 patients who complained of severe tension (nervousness, depression, etc.), 22 reported satisfactory relief of these symptoms, while 12 did not benefit from therapy. Two of the 12 unrelieved patients reported dizziness as an undesirable effect of the medication. This dizziness disappeared when the drug was discontinued. Three of the four patients in whom headache was the predominant symptom during the premenstruum were relieved while one was not helped by chlorothiazide therapy.

Three patients with virginal breast hypertrophy were given 1,000 mgm. chlorothiazide daily for the last 10 days of each menstrual cycle for two to four months. All three patients were relieved of painful breast engorgement during this time.

Eight menopausal patients with an unusual degree of edema of undetermined etiology were given continuous chlorothiazide therapy (500-1,000 mgm. daily) for two to four months. Seven were benefited by adequate diuresis and loss of edema, while one patient failed to respond and discontinued therapy after one week because of nausea. Continuous therapy did not result in development of drug resistance or any other undesirable effects. Two of these patients were hypertensive and a significant reduction in blood pressure was noted in one (200/110 to 160/90), while the diastolic pressure remained the same or was slightly elevated in the other (180/100 to 155/105). This second patient

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lost nine pounds in four days of therapy.

To 11 obese patients chlorothiazide was administered as an aid to weight reduction along with advice to follow a 1,200 calorie diet. All 11 patients

tive doses, the increased rate of sodium excretion is nearly balanced by increased chloride excretion, and little change in the rate of bicarbonate or potassium excretion occurs. Consequently, with therapeutic doses, acidosis and resistance to the diuretic action do not develop from prolonged administration.

TABLE 3
DIURETIC RESPONSE TO CHLOROTHIAZIDE IN LATE PREGNANCY

No. of Pts.	Effective Diuresis (Pts.)	Initiation of Therapy	Effective Dose (Gm.)			Duration of Therapy	Wt. loss 1st 24 hrs. (usual)	Blood Pressure Change	Loss of effect with continuous therapy	Untoward effects of therapy (Pts.)
			0.500	1.000	1.500					
47	47	6-8½ mos. gestation	14	30	3	4-12 wks. (1 pt. 20 weeks)	2-6 lbs.	None observed*	None	4

*All patients in this series were normotensive.

lost weight during the two to four months of continuous therapy. For example, one patient lost 23 pounds in two months (she stated that edema occurred when she missed taking the tablets for one day); another lost 18 pounds in three months; and another lost 40 pounds in three months of continuous therapy. Since response to handing out 1,200 calorie diets to obese patients is seldom this rewarding in the experience of the authors, it appeared that the continuous diuretic effect was helpful.

The profound and continued diuretic and saluretic effect, with virtual absence of significant toxic effects, suggested that chlorothiazide may be an ideal diuretic for use in control of edema in pregnancy and various gynecologic disorders.

Forty-seven consecutive patients with excessive weight gain and edema during late pregnancy, and 72 unselected patients with various gynecological disorders associated with edema were given chlorothiazide for evaluation of its diuretic effectiveness. There

TABLE 4
RESPONSE TO CHLOROTHIAZIDE IN GYNECOLOGICAL DISORDERS
(Usual Dose—1.000 Gm./Day)

	Number of Patients	Satisfactory Response	Unsatisfactory Response	Undesirable Effects
Premenstrual Molimina	50			
Edema (32)		32	0	
Tension (34)		22	12	2 (dizziness)
Headache (4)		3	1	
Mastodynia (8)		8	0	
Breast Hypertrophy	3	3		
Menopause (Edema)	8	7	1	1 (nausea)
Obesity (as aid to wt. loss)	11	11		1 (nausea)
Total No. of Patients	72	71*	1*	4

*Loss of edema

Summary and Conclusions

The clinical usefulness of chlorothiazide, a unique, non-mercurial, oral diuretic, was evaluated in the control of edema in 119 patients with various gynecologic disorders and late pregnancy. The mechanisms of action and commentary on the effectiveness of other current diuretic agents are considered. Although, in vitro, chlorothiazide is an effective carbonic anhydrase inhibitor, this does not appear to be the primary mechanism for producing diuresis in man. This compound is unique in that with effec-

was no change in blood pressure of these normotensive, non-toxic pregnant patients during chlorothiazide therapy. Dosage varied from 0.250 gm. to 1.500 gm. daily. The usual effective diuretic dose was 1.000 gm. daily in divided doses. Three of the 47 obstetrical patients required 1.500 gm. daily for effective diuresis. Therapy was instituted in most patients at about six months gestation, and was continued without interruption for four to 12 weeks—usually until the time of delivery. One prenatal patient received 1.000 gm. chlorothiazide daily for

20 weeks. Loss of weight (2 to 6 pounds) and disappearance of edema occurred in all of the pregnant patients within the first 24 to 48 hours. Edema did not recur during continued daily medication but reappeared within 24 hours in every patient who failed to take the medication regularly. All patients who have delivered at the time of this writing have had normal, full-term infants with no evidence of abnormal dehydration or toxicity resulting from maternal therapy. Four obstetrical patients and five patients with gynecological disorders discontinued medication because of undesirable side effects which disappeared when the drug was discontinued. These untoward symptoms included in four patients: nausea, weakness, drowsiness and dizziness; in one patient, numbness and tingling of the hands and fingers; in one patient, dyspnea; and in the other patient, fainting. Four other patients complained of dizziness, but continued the medication. (Table 5).

TABLE 5
UNTOWARD EFFECTS OF CHLOROTHIAZIDE THERAPY

Undesirable Effects		No. of Patients
None		107
Nausea	(4)	12*
Weakness	(4)	
Drowsiness	(4)	
Dizziness	(4)	
Fainting	(2)	
Numbness		
& Tingling	(1)	
Dyspnea	(1)	
Total		119

*8 of these patients discontinued medication because of undesirable effects.

In all of the 47 patients who received chlorothiazide for edema of late pregnancy, diuresis was satisfactory and edema did not recur so long as therapy was continued.

Chlorothiazide was administered to 72 patients for diuretic response in various gynecological disorders associated with edema. Thirty-two of these complained primarily of premenstrual edema. In all of these patients the edema was relieved or prevented by 0.500-1.000 gm. chlorothiazide daily during the last 10 days of the menstrual cycle. Nervousness and tension of the premenstruum were relieved in 22 of 34 patients with these symptoms, and premenstrual headache was relieved in three of four patients. All of eight patients who complained primarily of premenstrual breast congestion and pain (mastodynia) were relieved of this symptom.

Three patients with painful vaginal breast hy-

pertrophy were treated with continuous dosage of chlorothiazide 1.000 gm. daily for one to three months and in all three the breast pain was reduced.

Seven of eight menopausal patients to whom chlorothiazide was administered for treatment of edema (of undetermined etiology) responded with satisfactory diuresis and elimination of edema.

Chlorothiazide was found to be a helpful adjunct to diet in treatment of obesity in 11 patients with minor gynecological complaints. All 11 patients lost weight during the two to four months of continuous therapy. One patient lost 40 pounds in three months and another lost 23 pounds in two months with a 1,200 calorie diet and chlorothiazide 1.000 gm. daily.

Because of the profound diuretic effectiveness, the lack of development of drug resistance, and infrequency of significant side-effects, these clinical observations indicate that chlorothiazide is an ideal diuretic for the treatment and prevention of edema in pregnancy and various gynecological disorders.

Medical College of Georgia

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SURVEY SHOWS PEOPLE WANT TO CHOOSE OWN DOCTOR

MORE THAN THREE-FOURTHS of the population of the United States want to choose their own doctor.

In addition, they want to assume all or part of the responsibility for paying their doctor bills.

These are among the findings in a survey conducted among a sampling of the adult general population by Opinion Research Corporation, Princeton, N. J., for the American Medical Association.

The purpose of the study was to explore attitudes about the choice of physicians. The study also showed that:

88 per cent of the population believe the right to see the same doctor regularly is of vital importance.

89 per cent believe that medical care in this country has improved over the past 20 years. Half of these persons ascribe the improvement to more and better research and advances in medical science.

76 per cent of the people said they wanted to choose their own physicians; 13 per cent saw no difference in whether they or someone else chooses their physician; eight per cent preferred to have someone else choose, and three per cent had no opinion.

In answer to further questioning, 93 per cent of those surveyed felt that free choice would give them more confidence in the doctor; 84 per cent thought doctors would take a more personal interest in them, and 79 per cent believed they would have less trouble getting the doctor to make a home call.

Concerning the right to see the same physician all the time, 88 per cent felt this right to be very important. Of the 12 per cent who did not feel such

continuity to be of vital importance, eight per cent saw no difference in whether or not they saw the same doctor every time, and four per cent gave other comments.

In answering still another set of questions, 93 per cent felt such continuity would give them more confidence in the doctor; 92 per cent thought doctors would take a more personal interest, and 84 per cent believed they would have less trouble getting a doctor to make a house call.

When queried about the main advantages of a regular doctor, those interviewed gave a variety of reasons. 62 per cent cited the physician's knowledge of their medical history. They said, "He knows your system inside and out from dealing with you regularly; he knows what you've had."

Also mentioned by 30 per cent was reliability on emergency calls; confidence in the physician by 21 per cent, and a closer relationship between doctor and patient by 18 per cent.

Concerning the payment of medical bills, a total of 79 per cent wanted to assume all or part of the responsibility for paying their doctor bills either by direct payment or by paying part of insurance premiums.

The 79 per cent breaks down into the following: 16 per cent for paying all doctor bills directly; 16 per cent for paying all costs of insurance plans, and 47 per cent for paying part of the cost of an insurance plan. The remaining 21 per cent favored someone else's paying the bills.

ANOTHER TOUGH JOB AHEAD

AFTER ALMOST FIVE YEARS of continued effort on the part of your Association Council and all concerned, the problems relating to corporate medical practice and the medical code of ethics at the Talmadge Memorial Hospital are now successfully solved.

The Council is now gravely concerned that many hospitals and other institutions are involved in basically the same problem. It is apparent that the practice of certain medical specialties are presently considered hospital services, and the physicians in these specialties are, in fact, employees of the hospital. Thus, many institutions have been practicing medicine and some physicians under these arrangements where an employer-employee relationship exists have violated the code of medical ethics.

Since these practices have existed for a long time, it is felt that the change necessary to meet legal and ethical standards should be a gradual one to suit the many different situations. The Institution-Physician Relations Committee of Council has undertaken a program to acquaint all concerned with these problems. The committee proposes to work with the specialty societies, the hospital association, and hospital administrators in changing the status-quo to one that is both legal and ethical.

It is also important that the many insurance companies realize that their hospitalization policies cannot provide for medical care as this is not a hospital service. These medical services must be covered only in medical and surgical policies as duly licensed physicians provide this type of care.

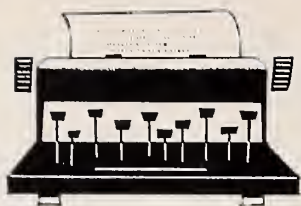
The issues at stake in this problem are clear-cut. It is hoped through the medium of an educational campaign that both institutions and physicians will cooperate—and that the necessary changes can be instituted smoothly over a short period of time to maintain the legal and ethical practice of medicine in our state.



Lee Howard, Sr., Savannah

Lee Howard, M.D.

President, Medical Association of Georgia



editorials

Introvert to Extrovert

WITH THE PUBLICATION of this final 1958 issue of the *Journal*, it seems fitting to review for a moment the year's accomplishments. Twelve issues of the *Journal* are not easy to summarize nor is it a small matter to chronicle in a few words the activities of nearly 3,000 Georgia physicians participating in the work of 70 component societies, 40 MAG Committees, the Council, 17 specialty societies and the state boards, as well as other affiliated and related organizations. But perhaps a few general trends can be noted and thus the future more clearly seen through a better understanding of the immediate past.

1958 will probably be remembered in MAG history as the year its personality changed from "introvert" to "extrovert." For it was during this year that emphasis was focused on outside relationships with other organizations, the state and federal government, and the general public. 1958 may well be remembered as the year the Association came into full realization of its responsibilities in the business and civic life of the state.

Early in the year, the long-standing Talmadge Hospital dispute was settled following a meeting of the AMA Mediation Committee in Augusta. Certainly the solution of this half-internal, half-external problem was the greatest single accomplishment of the year. And even as the cessation of "hostilities" seemed in the final stages, activity in other areas began to pick up.

During 1958 the MAG came to grips with difficult problems involving the profession's outside relationships. Association committees or representatives discussed or negotiated with the following groups, to mention only a few: the Veterans Administration concerning fees in the Hometown Care Program; the State Workmen's Compensation Board concerning employee selection of physician and fees; the VFW concerning non-service connected VA

Medical Care; the Department of Defense concerning an indemnity type medicare program; and the Health Insurance Council concerning standardization of claim forms.

The Association moved into a new field with the appointment of a special committee on School Child Health, and made real progress in better liaison with dentists and pharmacists (through the Interprofessional Council of Georgia), with lawyers (adoption of a Physician-Lawyer Code of Cooperation), with hospitals (establishment of the Georgia Hospital-Medical Mediation Council) and with the press (inauguration of the weekly health column—"Doc MAG Says").

MAG renewed its liaison with the Georgia Division of the American Cancer Society, the Atlanta Better Business Bureau, the State Medical Education Board, and the Georgia Association of Blood Banks. One of the outstanding achievements of the year was the institution of special courses at both medical schools titled "The Art of the Practice of Medicine." This series of lectures presented by prominent MAG members has already received national attention and will be repeated in 1959.

Medicare was a topic of much discussion throughout the year. The overall Medicare program was damned by some and cursed by others when it was cut back drastically in October. Many termed it a major step toward government medicine.

Meanwhile in Washington, a real threat to the private practice of medicine—the Forand Bill—"died" in the House Ways and Means Committee in August when Congress adjourned.

This was the first year the MAG began seriously thinking about an office building of its own and negotiations were begun for one specific building.

Not the least among 1958's accomplishments was the appointment of our esteemed Executive Secretary, Mr. Milton Krueger, to the AMA-PR Advisory

Committee and also to the Board of Directors of the Medical Society Executives Association.

1959 and the Future

As can be plainly seen, the MAG is operating on many fronts at the same time. Our "candle burns at both ends," so to speak.

We need more physicians to take an active interest in the vital activities of the Association.

We need young leadership with vision to plan ahead.

Above all, we need unity among our members. This is no time for petty bickering. Old grudges must be put aside to make room for the work at hand.

On all sides come signs of danger. Organized labor has proclaimed that Forand-type legislation will be one of its major objectives in the way of legislation it wants passed in the next session of Congress. Distant rumbles are heard from other

states in regard to physician-Blue Shield relationships. Problems are arising both here and in other states in regard to industrial medicine, cultists, hospital standards, health and accident insurance, malpractice suits, and many other matters.

While we pat ourselves on the back for the tremendous work done during 1958, we must at the same time realize that all of this has only scratched the surface and if it has done anything, it has merely served to show us how much further work needs to be done ahead.

Growth, as every physician knows, is a complex process. Growth fits one for handling of problems and, at the same time, produces more problems itself. Eight years ago a part-time physician and one stenographer operated the headquarters office. It is now manned by ten full time personnel and three part time. Let us hope for as much growth in the next eight years. Let us also hope for a better view of the horizon eight years hence.

for the physician
and for the patient

Vital Medical News

ALTHOUGH THE AVERAGE physician's desk is overstacked with daily mail, there are two publications vital to the everyday practice of medicine. The one publication, a new newspaper of American medicine, is for the doctor himself. Titled *The AMA NEWS*, this bimonthly tabloid reflects and reports on all aspects of the physician's life, his work, his problems. The other publication written primarily for the doctor's patients is called *Today's Health*. This monthly magazine gives clear and authoritative medical information to the public in an easy-to-read, popular style.

We are convinced that every doctor should consider *The AMA NEWS* and *Today's Health* as basic equipment for his practice. *The AMA NEWS* is for the doctor; *Today's Health* is for his patients to read in his office waiting room.

Why should a physician busy with actual practice regard these two publications a necessity? Consider and gauge the following data as your answer on the importance of these two companion pieces to modern medical practice.

The AMA News

To paraphrase, no doctor can effectively practice medicine by scientific skill alone nor can he practice as an island unto himself. There is adequate com-

munication for the physician in the field of scientific medicine, but in the non-technical area — the medico-economic and socio-economic fields of medicine—there is scant and haphazard coverage. *The AMA NEWS* in one package twice a month informs the doctor about the medical world beyond his examining room and hospital. Legislation, trends in business, legal decisions, taxes; all of these forces affect the practice of medicine. And it is the practical purpose of *The AMA NEWS* to keep physicians current on these matters—to help doctors keep abreast of the day-to-day problems that go with practicing medicine. The goal of *The AMA NEWS* is to become medicine's most effective conduit of communication.

Join hands with your colleagues in the profession to share their experience, their knowledge, their pursuits as reported in this single newspaper for the entire profession. Save time by taking time to read your *AMA NEWS* as you receive it in your office every two weeks. Keep in touch with the pulse of the medical world.

Today's Health

Of course, one of the physician's primary interests is in his patients' attitudes. Result is easier gained with a cooperative, understanding patient. Fears,

misconceptions, and often mistrust make patient treatment the more difficult. To condition patients, it is easier if they are provided with up-to-date medical facts rather than the "old wives tales" type of medical hearsay. In a recent newspaper survey it was shown that the American public is hungry for medical news. *Today's Health* is devoted to informing the public in layman language about correct and tested medical fact.

The doctor's office has always been recognized as the workshop for medical treatment. It then seems logical that this same office should and can provide literature that speaks of the profession's progress, the profession's ideals and aims in a manner meaningful to the lay mind. *Today's Health*, using the format of mass appeal to which the public has become accustomed in monthly magazines, does just this job and does it extremely well! Your patient will benefit from learning of medicine through

this magazine and, in turn, so will you benefit from his having read about this or that illness in this authoritative and accurate source.

To condition your patients with the knowledge of medicine in *Today's Health* is to treat a better informed and more responsive patient. Copies of each month's issue of *Today's Health* in your waiting room will become "dog-eared" with use and be far more pertinent than the other popular magazines on your waiting room table.

In summary, *The AMA NEWS* and *Today's Health* can be silent partners in your practice of medicine. *AMA NEWS* is sent to every doctor of medicine free of charge as a service of the American Medical Association to the profession. *Today's Health* annual subscriptions may be obtained for \$3.00 through your County Medical Society or from AMA by writing: *Today's Health*, Dept. 118th, 535 N. Dearborn Street, Chicago 10, Illinois. Let these two publications work with you in your professional attainment.

Routine Strokes

UNTIL RECENTLY MOST "routine strokes" were thought to be caused by thrombosis within the brain of one or more of the arterial branches arising from the circle of Willis, in particular the middle and anterior cerebral arteries and their small branches. The functional deficit that resulted was known to pinpoint the area of damage and it was assumed that this also localized the blocked blood vessel. With the advent of visualization of the intracranial and, particularly, the extracranial arterial tree by means of carotid and vertebral arteriography,¹ these suppositions are now under suspicion and, indeed, may be false in a large proportion of cases.

In 1914 Ramsay Hunt² described the syndrome of internal carotid artery occlusion and in the introduction of his paper said:

"The object of the present study is to emphasize the importance of obstructive lesions of the main arteries of the neck in the causation of softening of the brain and more especially to urge the routine examination of these vessels in all cases presenting cerebral symptoms of vascular origin. In other words, the writer would advocate the same attitude of mind toward this group of cases as toward intermittent claudication, gangrene, and other vascular symptoms of the extremities, and never omit a detailed examination of the main arterial stem."

His recommendations were largely ignored, however, probably for several reasons: first, the examination of the neck vessels by palpating them in the neck was, and is, unreliable as a means of testing for occlusion; second, the neck vessels have seldom in the past been dissected and studied in routine postmortems; and, finally, there is a tendency for the pathologist doing postmortems of those who have died of cerebral vascular accidents to cut the brain and search for areas of softening at the autopsy table without proper fixation and without prior careful examination of the blood vessels supplying the infarcted areas.³

In a series of papers beginning in 1951 Denny-Brown and Adams^{4,5,6} redefined and re-emphasized the neurological syndromes of internal carotid and basilar artery obstruction, particularly the repeated transient intermittent episodes that often preceded the "stroke" and irreversible damage. These observations, plus the increasing use of the techniques of angiography, revived interest in the relationship of neck vessel obstruction to cerebral vascular disease.

In 1954 Eastcott, Pickering, and Rob⁷ reported a typical case of partial occlusion of the internal carotid artery with recurrent episodes of monocular blindness and sensory and motor disturbances of the

opposite arm and leg, proved by arteriography and cured by resection of the stenosed portion of the artery with end-to-end anastomosis. Previous attempts to restore cerebral circulation by removing thrombi, by cutting out sections of vessel, or by cervical sympathectomy had not been encouraging, but with the great strides being made in vascular surgery other successful surgical procedures are now beginning to appear.⁸

Meanwhile, another therapeutic approach has been developed that offers relief of recurrent attacks and prevents hemiplegia and death in the majority of cases. In 1955 Millikan and Siekert⁹ reported the immediate and dramatic results of continuous anticoagulant therapy in stopping the intermittent symptoms in internal carotid and basilar artery insufficiency syndromes. They have recently reported¹⁰ the results in a two year followup of 317 patients maintained on anticoagulants. Ninety of 94 patients with the basilar syndrome had cessation of attacks, and the mortality rate in this group dropped from 58 per cent to eight per cent. In 82 of 85 patients with the internal carotid syndrome the attacks stopped, and only six per cent went on to hemiplegia compared to 35 per cent in a control series. Anticoagulant therapy is therefore the treatment of choice at the present time in syndromes of intermittent vascular ischemia.

Now the question is, how often do these conditions occur and how often are the neurologic findings atypical and the diagnosis missed? From the results of one recent study it would seem that neck vessel occlusion is much more common than previously suspected. Tatelman¹¹ and Webster⁸ have reported the results of bilateral internal carotid and also vertebral arteriography in 200 consecutive cases of "stroke" or "CVA" admitted to the Detroit Memorial Hospital. (In their hands the procedure was quite safe with only one untoward reaction—sudden death in an elderly woman with an unsuspected extensive malignancy.) In 10.5 per cent there was complete occlusion and in 10 per cent occlusion of the internal carotid artery, usually at or near the bifurcation of the common carotid in the neck. Another 2.5 per cent had basilar artery occlusion, and only 4.5 per cent had middle cerebral and 7.5 per cent anterior cerebral artery occlusion. 12 per cent had a surgical mass lesion (brain tumor, intracerebral, or subdural hematoma). In less than 10 per cent was no apparent cause found for the "CVA" or "stroke." Webster points out the value of arteriography in making a definitive diagnosis leading to lifesaving surgical and medical treatment in a large majority of these 200 cases.

Other aspects in the routine examination of patients with suspected cerebral vascular disease are

being emphasized. Crevasse and Logue¹² have described typical murmurs heard over the bifurcation of the carotid and also bruits heard over the eyeball in some patients with these syndromes. Webster⁸ suggests that occlusion of the carotid by external compression may be a useful test for cerebral vascular disease of all types. Others,⁸ however, advise against any neck manipulation and also think that arteriography in these conditions is hazardous.

We as physicians should never have coined the term "routine stroke." The physician more than any other person is forced by daily experience to recognize the individuality of the human person by the individuality of his response to disease. Perhaps the "routine" aspects of such cases has been the "routine" therapy employed due to lack of specific treatment. To quote Irving S. Wright:¹³

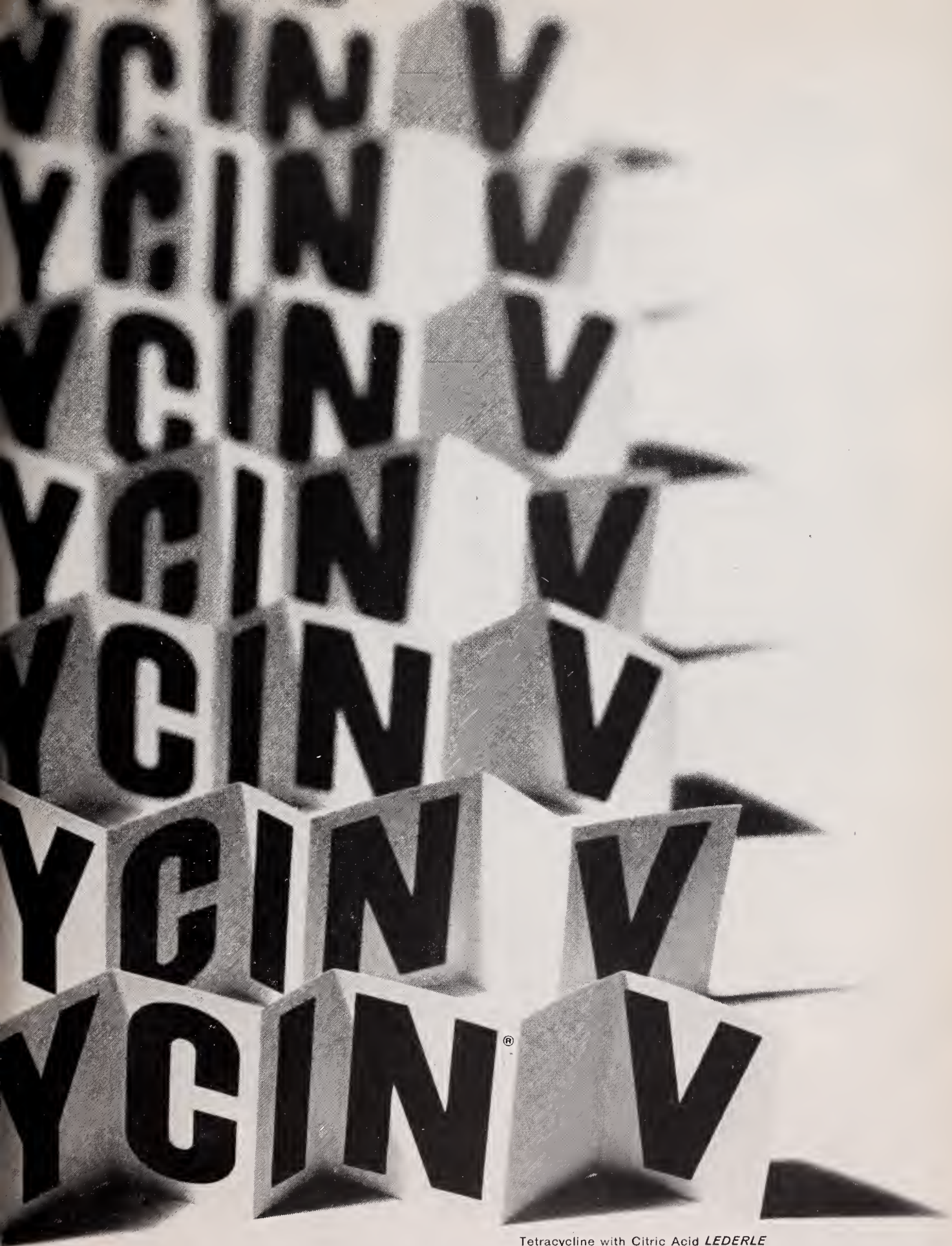
"In the past, therapy for strokes presented no problem. There was none. Today, however, with the advent of new therapeutic agents, notably anticoagulants, enzymes such as plasmin, and new surgical techniques, the clinician can no longer treat his patient with 'skillful neglect' but is forced to undertake more careful study and analysis to determine whether the new therapeutic approaches may be helpful or even lifesaving."

Joseph A. Wilber, M.D.
3158 Maple Drive, N.E.

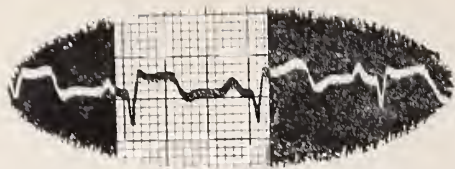
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Tetracycline with Citric Acid **LEDERLE**



heart page

POTASSIUM AND THE HEART

Author J. Merrill, M.D., *Atlanta*

THE EXACT MANNER in which K^+ acts in the contraction of the heart muscle fiber is uncertain but a great deal is known about it. As the electrical charge of the muscle cell rises, Na^+ is rushing in followed by extrusion of potassium. Only after a certain amount of K^+ is extruded can the cell contract. Following this, the Na^+ is "pumped out" and during the resting state the K^+ reenters the cell. One molecule of K^+ is exchanged for two molecules of Na^+ .

Digitalis is thought to act on the cell membrane to hold the K^+ out until contraction is completed. Digitalis intoxication thus would tend to stop the heart in a state of contraction. Potassium intoxication tends to overcome digitalis effect more or less by mass action to force K^+ back into the cell over digitalis resistance. Hypopotassemia, on the other hand, enhances a digitalis effect. Thus, loss of K^+ from vomiting or diarrhea or through removal of large amounts of ascitic fluid, or in association with a copious diuresis especially from mercurials or from Diuril,[®] may precipitate digitalis intoxication in a previously properly digitalized patient. Administration of K^+ salts may alleviate the cardiac manifestations of digitalis intoxication.

Potassium citrate applied to the surface of the heart is being used to stop the heart during cardiac surgery.

Potassium, as would be expected, has a profound effect upon the electrocardiogram. Hypopotassemia (moderate) in about 70 per cent of instances causes an increased amplitude of the U-wave and a reduced amplitude of the T-wave. These may blend to cause a prolongation of the QT (really the QU) interval.

Sagging of the ST segment as with digitalis effect is also seen.

The electrocardiogram registers K^+ intoxication accurately in over 90 per cent of the cases. A narrowing and peaking of the T-wave especially near the apex is followed by lengthening of the PR interval and widening and slurring of the QRS complex. Finally the P-wave may disappear, the R-wave diminish in amplitude, and the S-wave increase in depth. Other actions and acid base balance modify and play a role in these changes.

Harold Levine and associates showed that RS-T segment elevations could be abolished by removal of K^+ by the artificial kidney even when this EKG change was accompanied by real structural abnormalities such as pericarditis. This suggested to them that currents of injury in myocardial infarction and pericarditis may have an ultimate chemical origin.

The presence of K^+ depletion has been demonstrated in heart failure. This may stem from hyperaldosteronism which is supposed to be present in heart failure.

It has been suggested that the K^+ liberated by muscle damage from myocardial infarction is a major excitant in the production of ventricular tachycardia resulting from myocardial ischemia. Practically all of the K^+ leaves the ischemic cells by the end of 12 hours.

Surawicz and collaborators produced multiple supraventricular and ventricular ectopic beats in rabbits by perfusing the coronary arteries with a potassium-free fluid. If calcium was also omitted from the perfusing fluid, no ectopic beats occurred. As a result of these findings, the blood calcium was

Prepared at the request of the Committee on Professional Education of the Georgia Heart Association.

reduced with Edathamil disodium in 25 patients with ectopic beats or stable ectopic rhythm. The ventricular ectopic beats practically disappeared in nine of 18 patients and supraventricular ectopic beats disappeared in seven of 13. Auricular fibrillation was not affected. Administration of K⁺ apparently was not tried. These interesting findings warrant further study.

AMA UNVEILS NEW AGING PROGRAM

A PROMISE OF MORE useful and productive lives for the aging population has been made by the American Medical Association's Committee on Aging.

This assurance was given to a medical society planning conference in Chicago as part of a twofold program of individual and community action to achieve these ends.

In summarizing three years of concentrated activity in the field of aging the committee placed great stress on individual action.

"The major scourges of aging man are largely the result of faulty diet, flabby bodies from poor hygiene, excessive fatigue, and aimless living," the committee said.

A plan for "positive health" was suggested by Dr. Edward L. Bortz, Philadelphia, a member of the A.M.A. committee, who cited the 10 basic needs for older persons:

- 1—A balanced diet including more protein, vitamins, and fluids; less fats and calories.
- 2—Regular elimination of waste products.
- 3—Adequate rest of both mind and body.
- 4—Pursuit of interesting and specific recreational activities.
- 5—A sense of humor, which is the best antidote for tension.
- 6—Avoidance of excessive emotional tension which leads to personal ineffectiveness.
- 7—Mutual loyalty of friends and family.
- 8—Pride in a job.
- 9—Participation in community affairs.
- 10—Continued expansion of knowledge, wisdom, and experiences, which add to maturity.

Dr. Bortz termed these 10 points a "do-it-yourself" program which should allow the average healthy man and woman to live 100 years with much less suffering and deterioration than is now occurring.

He said the two major elements in prolonging life are the preservation of energy and a high degree of motivation. The first is maintained through proper diet, exercise, and rest, while the second comes from purposeful, useful activity.

"Useful activity," the doctor said, "provides high and specific motivation — a justification for living these added years. When the incentive, the zest for

Prolonged hypokalemia even for as long as five or six days, as from chronic diarrhea, long use of laxatives, pyelonephritis with renal tubular failure, corticosteroids, and hyperaldosteronism, leads to small areas of myocardial necrosis. Usually this lesion is reversible but if it persists for many weeks, there may be permanent myocardial insufficiency.

living, is lost, senility is inevitable."

His thoughts were echoed by Dr. Theodore G. Klumpp, president, Winthrop Laboratories, New York, who said, "Based on loss of motivation and interest and to a large extent because of the fear psychosis against exercise and exertion, our middle aged and older people reduce their physical activities with damaging, if not disastrous, results.

"I believe that we must do everything we can, as we grow older, to resist the inclination to slow down the tempo of our living. I am convinced that if you will just sit and wait for death to come along, you will not have long to wait."

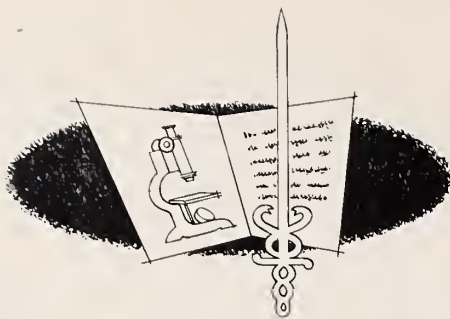
The role of the community in helping the aging was outlined by Dr. Frederick C. Swartz, Lansing, Mich., committee chairman, in a six-part program. Designed to supplement individual health plans, the program calls for:

- 1—Stimulation of a realistic attitude toward aging by all people.
- 2—Extension of effective methods of financing health care for the aged.
- 3—Expansion of skilled-personnel training programs and improvement of medical and related facilities for older people.
- 4—Promotion of health maintenance programs and wider use of restorative and rehabilitative services.
- 5—Amplification of medical and socio-economic research in problems of aging.
- 6—Cooperation in community programs for senior citizens.

Dr. Swartz said, "It is the duty and responsibility of the state and county medical societies to study the situation of the aging population in their own states.

"The panorama is rapidly changing and if the state and national committees on aging work hand in hand, we may find an answer for many situations before they become problems."

The American Medical Association hopes these programs will provide a foundation upon which a "new world of aging," reaffirming the worth and responsibilities of individual and family, can be built.



cancer page

THE INVESTIGATION OF SKELETAL LESIONS

TO WRITE A FORMULA for arriving at the diagnosis of every bone tumor obviously would be impossible. Early diagnosis of malignancy in bone lesions remains our best therapeutic tool. Biopsy of suspect lesions is frequently the most essential step in making the diagnosis. It is, like all operations, a serious matter and can be hazardous to the patient. Injudiciously done it can even defeat the ultimate objective not only of diagnosis but of successful treatment.

The diagnostic approach to tumors of bone is enhanced greatly by a knowledge of lesions of bone in general. One must keep in mind that the unknown lesion of bone may be either a localized process or a manifestation of systemic disease, neoplastic or otherwise.

Working within the bounds of his own familiarity with the question, each of us might try to place the problem of the presenting patient in one of several categories as follows:

- I. Non-neoplastic disease
 - A. Requiring diagnosis and/or treatment
 - B. Requiring observation only
- II. Neoplastic disease
 - A. Requiring study and/or treatment
 - B. Requiring observation only
- III. For consultation or referral

In the evaluation of these problems, simple clinical points can be of great help. The patient's age immediately disposes of certain possibilities and brings others into sharper focus. The presence of pain suggests an active process. Its qualitative and quantitative features can be a rough guide to the presence of malignancy and night pain relieved by aspirin strongly suggests one particular lesion, namely osteoid osteoma. Tenderness suggests activity. Induration of soft tissues points toward infection or malignancy. Progression of symptoms or findings has the usual implications. A careful his-

Robert P. Kelly, M.D., *Atlanta*

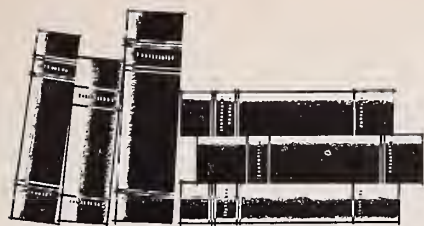
tory and the classic medical approach remain the keynote to the clinical evaluation of these patients.

In addition to routine laboratory investigations, the sedimentation rate, tuberculin test, a chest plate, and a skeletal survey are the minimum means and oftentimes the adequate tools for solving such a diagnostic problem.

Certain points relative to the technique of biopsy are noteworthy. A negative needle biopsy is less conclusive than a positive one. This is truer of lesions of bone than of those of soft tissues. Certain skeletal locations such as all of the fibula except the lateral malleolus, the distal end of the ulna, ribs, and a number of others, all lend themselves to excisional biopsy rather than to a mere sampling procedure. Practically all benign neoplasms of bone are, and some of the malignant ones may be, subject to cure in this way. Two tumors in particular commend themselves to this approach. These are chondrosarcoma and giant cell tumor of bone. Local or sampling biopsy of the former can seed implants into surrounding tissues. Incomplete surgery on benign giant cell tumors tends to stimulate these lesions to develop malignant characteristics.

The excisional biopsy approach in each of these lesions is best planned and executed by surgeons well versed in such procedures. Thus, when these lesions are suspected in an area where the site cannot clearly be sacrificed without detriment to the patient, the services of an orthopedic surgeon are especially valuable.

Just as in other form of malignancy, curability and survival time in bone tumors are on the increase. We must all, therefore, prepare ourselves to move in and close the diagnostic gap.



physician's bookshelf

BOOKS RECEIVED

Gofman, John W., M.D., **WHAT WE DO KNOW ABOUT HEART ATTACKS**, G. P. Putnam's Sons, New York, (October) 1958, 180 pp., \$3.50.

Sakel, Manfred, M.D., **SCHIZOPHRENIA**, Philosophical Library, New York, 1958, 335 pp., \$5.00.

Hamm, Frank Coleman, M.D., and Weinberg, Sidney R., M.D., **UROLOGY IN GENERAL PRACTICE**, J. B. Lippincott Company, Philadelphia, 1958, 293 pp., \$6.00.

Von Oettingen, W.F., M.D., Ph.D., **POISONING: A GUIDE TO CLINICAL DIAGNOSIS AND TREATMENT**, W. B. Saunders Company, Philadelphia, 1958, 627 pp.

Foot, R. Rowden, F.I.C.S., M.R.C.S., L.R.C.P., D.R.O.G., **THE PHYSICAL TREATMENT OF VARICOSE ULCERS**, E. & S. Livingstone Ltd., Edinburgh, The William & Wilkins Company, Baltimore, (exclusive U. S. Agents) 125 pp., \$4.00.

United States Department of Defense, **EMERGENCY WAR SURGERY, NATO HANDBOOK**, Published by The Surgeon General, Department of the Army, U. S. Government Printing Office, Washington, 1958, 411 pp., \$2.25.

Cowdry, E. V., Ph.D., Sc.D. (Hon.) (Editor), **THE CARE OF THE GERIATRIC PATIENT**, The C. V. Mosby Co., St. Louis, 1958, 438 pp., \$8.00.

Reitzes, Deitrich C., **NEGROS IN MEDICINE**, Harvard University Press, Cambridge, Mass., 1958, 400 pp., \$7.00.

REVIEWS

Jasper, H. H.; Proctor, L. D.; Knighton, R. S.; Noshay, W. C.; and Costello, R. T., **RETICULAR FORMATION OF THE BRAIN**, Henry Ford Hospital International Symposium, Little Brown & Co, Inc., 1958.

THIS EXTREMELY VALUABLE and highly scientific volume represents the combined knowledge of some 70 investigators from many countries of our present day concept pertaining to the function of the reticular formation of the brain.

The reticular formation is that mass of cells in the brain stem and spinal cord that are not utilized in the formation of motor or sensory relay nuclei. In mammals it is the remanent of those structures, which in primitive forms represented the highest level of integrative nervous activity. With the development of the complex nervous system of higher forms, definite nuclei and tracts have developed about this core of primitive nuclear and axonic mass. In the past decade much has been learned concerning the physiology, anatomy, and pharmacology of this once considered wasteland of the

reticular formation. The demonstrated functions of the reticular formation are multiple through its inner connections with the spinal cord, basal ganglia, cerebellum, vestibular nuclei, cerebral cortex, and its response to humoral excitation. Its influences are exerted both rostrally and caudally. Those influences directed cephalically are mediated through neurons which subserve arousal, sustain wakefulness and all the mental attributes of conscious awareness. Caudal influences modify muscle tone and movement, sensory appreciation, and visual regulation. Manifestations of disturbed function of the reticular substance are characterized by coma, the anesthetic state, by spasticity or disturbances in motion with tremor, and by faulty sensory perception. Available evidence indicates a very complex interdependence of all reticular activity.

The more one studies this very highly scientific volume concerning the form and function of the reticular formation, the more one appreciates its utter complexity. This volume, therefore, is an extremely valuable reference book but because of its highly technical character would probably arouse the interest of only a limited number of clinicians.

Homer S. Swanson, M.D.

United States Department of Defense **EMERGENCY WAR SURGERY**, Government Printing Office, Washington, D. C., \$2.25.

THIS IS AN EXCELLENT compendium of the treatment of all types of trauma. Although it was written for the various branches of the armed service, it is equally applicable to civilian trauma, such as that encountered today on the highway and in modern factories. The book is well written and is small enough to fit into the uniform or coat pocket. It should be of great value to all physicians who are called upon to treat trauma. The index is very complete and a copy of this book could be used with profit in the office of every physician who encounters trauma in his practice.

Duncan Shepard, M.D.

Miller, Norman F., M.D.; Evans, T.N., M.D.; and Haas, R. L., M.D., **"Human Parturition,"** The Williams & Wilkins Company, Baltimore, 248 pp., \$7.50.

THE AUTHORS HAVE condensed a vast store of sound, practical information into a compact volume. The management of normal and abnormal labor in all four stages, as well as abortions and premature labor, is adequately presented.

The opening chapters deal with pelvic structure and with the physiologic and pathologic behavior of the uterus. A good section on obstetric roentgenography is included. Several good chapters follow that stress the importance of a thorough initial evaluation of the pa-

Acknowledgment of all books received will be made in this column and this will be deemed by the JOURNAL as full compensation for those sending them. Selection for reviews will be made at the discretion of the editor.

BOOK REVIEWS / Continued

tient from both the mental and physical aspects. Management of normal and complicated labors and the use of analgesia and anaesthesia is presented in an orderly manner.

The remainder of the book deals with various obstetric operations such as forceps, Caesarean, Duhrsen's incisions, and versions. Hemorrhage of pregnancy and labor is fully covered. The final chapters describe fetal and maternal conditions complicating labor.

This book will be of great value to the student and resident during his training period. For those in practice, it will serve as a reliable guide to the management of the often perplexing labor case.

George A. Niles, Jr., M.D.

Bernreiter, Michael, M.D., ELECTROCARDIOGRAPHY, J. B. Lippincott and Company, Philadelphia and Montreal, 1958, 134 pages.

THIS LITTLE BOOK is an excellent brief outline of the principles of modern clinical electrocardiography. The author has done a good job of reducing the text to a minimum and the style is almost telegraphic. The result is an excellent introductory textbook. Although the subject matter seems quite complete to one familiar with the practice of electrocardiography, it would certainly be too sketchy and inadequate for the student who had nothing more than this textbook from which to learn the subject. Thus, like most brief textbooks, this book would find its greatest usefulness as an outline to be used by the students taking the author's course of lectures.

The book is too brief and sketchy to be used as a reference work. The material which it does contain is apparently quite accurate and clearly presented. Nothing is said about myxedema. There is not enough on T wave abnormalities. Some of the tachycardias are not clearly described. Nevertheless, the book can be recommended as an excellent and clearly written brief introduction to the subject.

Arthur M. Knight, Jr., M.D.

Florey, Sir Howard, M.D., (Editor) GENERAL PATHOLOGY, W. B. Saunders and Company, Philadelphia, 1958, 918 pp.

THE TITLE OF this book, "General Pathology," is explanatory of its general nature. It is based on lectures delivered at the Sir William Dunn School of Pathology, University of Oxford, by individuals interested in many of the basic disciplines.

It consists of 43 chapters and index of 932 pages, written by 15 authors and edited by Dr. Florey (Professor of Pathology).

This is a well written book containing much useful fundamental information which should be known to all medical students and practitioners.

The information is patterned after the philosophy of one of the broader definitions of Pathology which is, "the study of the causes of and the effects (both structural and functional) produced by disease."

In addition to the expected chapters on general pathology there are chapters on "Fever," "Edema," and "The Functional Significance of Connective Tissues." There are several chapters concerned with the "Pathogenicity and Virulence of Micro-Organisms," "Antigens," and "Antibodies and Immunity."

In the Preface to this Second edition Dr. Florey states that this "edition is intended for the better student who has a good grounding in physiology and biochemistry. It is hoped to arouse his interest in the functional as well as the morphological aspects of pathology at an early stage of his career."

He might have added that it is also for the physician who wishes to maintain and keep abreast of the fundamental knowledge of disease. This will enable him to better understand what he is treating and possible how best to do this.

I would recommend this book to all medical students and to those physicians interested in keeping abreast of the functional processes of disease.

John T. Godwin

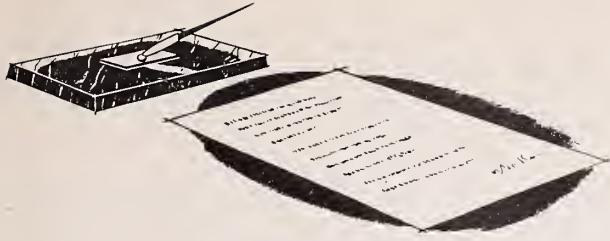
WANTED: OLD PHOTOS OF PHYSICIANS DRIVING ANCIENT CARS

THE ILLINOIS STATE Medical Society is preparing an exhibit centered around an *Illinois Medical Journal* article which told of the role of physicians in the development of the automobile in the United States at the turn of the century.

To help illustrate this exhibit, the Society will appreciate the loan of old photographs showing physicians at the wheels of cars of 1900-1910 vintage. Scenes showing difficulties on the road, or

poor highway conditions, are especially desired. Enlargements will be made of these photographs and the originals returned undamaged.

Photographs should be accompanied by a memo giving the name and town of the physician, whether living or deceased, and the make and year of the automobile. They should be sent to Mr. John A. Mirt, Illinois State Medical Society, 185 North Wabash Avenue, Chicago 1, Illinois.



abstracts by georgia authors

Flinchum, Darius and C. E. Irwin, 340 Boulevard N.E., Atlanta 12, Georgia, "Paralytic Dislocation of the Hip," South M. J., 51: 1157-1160 (Sept.) 58.

Paralytic dislocation of the hip occurring after poliomyelitis remains a difficult problem. This disorder is seen more frequently in individuals who had their acute onset early in life.

Unfavorable muscle imbalance about the hip plays an important role in the development of this condition.

Instability and dislocation should be anticipated and detected early before secondary changes and so much laxity develop around the hip joint.

Clinical examination will reveal subluxation of the hip long before it is noted by X-ray. External femoral torsion is frequently present, and if this is corrected early, a stable, functional hip may be preserved.

Seven illustrated cases are presented.

Schafer, Herbert H., Medical College of Georgia, Augusta, Georgia, "Bedside Diagnosis of Cardiac Arrhythmias in Geriatric Patients," Geriatrics, 13:634-639 (Oct.) 58.

By thorough physical examination, many cardiac irregularities can be diagnosed at the bedside. Methods for detecting various arrhythmias are described and the different forms of tachycardia and bradycardia are discussed.

Richardson, A. Cullen and George A. Williams, 710 Peachtree Street, N.E., Atlanta 8, Georgia, "Topical Androgenic Hormones in Vulvar Kraurosis-Leukoplakia Syndrome," Am. J. Obst. & Gynec., 76:791-799 (Oct.) 58.

A preliminary report is made on 25 patients with kraurosis and/or leukoplakia of the vulva, treated primarily with topical testosterone propionate in a petrolatum base. The patients had been under observation from one to six years, 22 of the 25 patients having been under observation for over one year. In all patients the diagnosis was confirmed by histologic study. Satisfactory symptomatic relief was obtained in all patients and had been maintained with continuous therapy. It was reported that exacerbation of symptoms followed omission of therapy as a rule. A brief classification of vulvar diseases and a discussion into the possible mode of action of the topical testosterone is included.

Emphasis is made of the fact that it was not felt that this treatment represents a final answer to kraurosis and/or leukoplakia of the vulva; however, in the experience of the authors this treat-

ment has proved to be far more effective in control of the patients' symptoms than anything else previously tried. None of the patients required surgery for the removal of lesions or relief of symptoms. No lesions had been seen to progress to malignant change during treatment. Gross improvement was noted early, but histologic improvement, though definite, occurred more slowly and required longer periods of therapy.

It is hoped that these observations will be of some value to the clinician and, above all, that this report will serve to stimulate additional basic research into this problem.

Brecher, Gerhard, Dept. of Physiology, Emory University, Georgia, "Critical Review of Recent Work on Ventricular Diastolic Suction," Circulation Research, 6:554-566 (Sept.) 58.

A new era of interest in the age-old problem of intraventricular diastolic suction began in 1952 with a flurry of publications. Based on a critical examination of these papers, the following conclusions were reached.

Unequivocal evidence in favor of the concept that a ventricular diastolic *vis a fronte* contributes to ventricular filling has been established only in the following conditions: (a) When the ventricle contains an abnormally small residual volume (rat, dog, turtle); (b) When the ventricle contains a more nearly normal, residual volume due to ejection against the resistance of a fluid column (dog, turtle). The contribution of the ventricular *vis a fronte* to ventricular filling at various residual volumes and various levels of cardiac activity is still unknown. The physiological significance of diastolic suction for the return flow of blood can therefore not yet be evaluated.

Moncrief, John A., 1293 Peachtree Street, N.E., Atlanta 9, Georgia, "Third Degree Burns of the Dorsum of the Hand," Am. J. Surgery 96:535-544 (Oct) 58.

Third Degree Burns of the Dorsum of the Hand which do not result in immediate functional disability as an immediate result of the thermal destruction of the delicate mechanism of the digits frequently results in delayed destruction of this mechanism by the infection, which invariably accompanies any burn. The structures most frequently involved are the middle slip of the extensor tendon overlying the proximal I-P joint and the common

extensor tendon overlying the metacarpal phalangeal joint of the digits. To prevent this delayed destruction, patients sustaining third degree burns of the dorsum of the hand were subjected to excision of the skin of the dorsum of the hands under tourniquet ischemia. This excision was carried out on the third to the fifth post operative day and coverage with thick split-thickness skin graft was accomplished on the second to third post excision day. Description of the areas of excision, the technique of excision and grafting and the post operative care are described. Seventeen patients representing a total of 27 hands involved in full-thickness skin loss were treated by early excision and grafting. A full range of motion including a fully coordinated and delicate movements was accomplished in 12 of the 21 hands of the patients who survived. This full range of function returned in from one to two months after injury. In those not gaining full range of motion, the range of function was obtained was adequate for writing, eating, and using the hands for all but the most intricate movements. One patient had to have the interphalangeal joints fused because of the depth of the burn. A return of function sufficient to enable him to grasp objects of moderate size without difficulty and to write, dress, and care for himself.

Manchester, P. Thomas Jr. and F. Phinizz Calhoun Jr., Department of Ophthalmology, Emory University School of Medicine, Emory University, Georgia, "Dominant Hereditary Optic Atrophy with Bitemporal Field Defects," Arch. Ophthal., 60:479-484 (Sept.) 58.

A family has been studied in which several members inherited optic atrophy. The condition is a dominant trait and its clinical characteristics differ markedly from those of Leber's hereditary optic atrophy. Leber's hereditary atrophy follows a sex linked recessive pattern. Optic atrophy in the dominant form shows no progression. Several of our patients revealed bitemporal hemianopsia with the small isopters.

Fair, John R. Medical College of Georgia, Augusta, Georgia, "Congenital Toxoplasmosis-Diagnostic Importance of Chorioretinitis," J.A.M.A., 168:250-253 (Sept. 20) 58.

Congenital toxoplasmosis is much more common than previously thought. There are many incomplete forms of the dis-

ABSTRACTS / Continued

ease, some of them limited to the eyes. Chorioretinitis is the most constant finding. No idea as to the incidence of the disease can be obtained until general practitioners, pediatricians, and internists become familiar with the eye findings. This requires familiarity with the use of the ophthalmoscope.

Fundus photographs of the typical chorioretinal scars of congenital toxoplasmosis are presented along with photographs of other common fundus conditions with which chorioretinitis may be confused.

Ridley, John H. and I. Keith Edwards, 36 Butler Street, N.E., Atlanta 3, Georgia, "Experimental Endometriosis in the Human," *Am. J. Obst. & Gynec.* 76:783-790 (Oct) 58.

Of the three theories of the histogenesis of endometriosis, that of Sampson's has been the primary one of widest acceptance. It is obvious that no one theory can explain all cases of endometriosis thus we also accept the theories of celomic metaplasia (Meyer) and "benign metastasis" through lymph channels (Halban).

In 1921, Sampson surmised that actual fragments of shed endometrium regurgitated through the tubal fimbria could grow at a new site of transplantation thus causing endometriosis. He was unable to prove the viability of these fragments and his theory was, of course, challenged. Thus, he eloquently stated "If bits of Mullerian mucosa carried by the menstrual blood escaping into the peritoneal cavity are always dead, the implantation theory, as presented by me, also is dead and should be buried and forgotten. If some of these bits are even occasionally alive, the implantation theory also is alive." Therefore, the fundamental weakness of Sampson's theory, admittedly, was the inability to demonstrate that menstrually shed fragments were viable. This viability had been proven only *in vitro* by tissue culture, living only a very few hours, but never proven *in vivo* in the human.

Criteria of this experiment were rigid: (1) The experiment must be harmless to the patient. (2) The endometrial fragments must be "shed". (3) The endometrial cavity could not be invaded for the specimen. (4) The specimen must be collected by natural flow by gravity and without trauma. (5) The site of implantation must be extracelomic, extragenital, and at a site where no other operation had

been performed. (6) The site of implantation must be apart from the expected drainage routes of the pelvic lymphatics. (7) The period for growth was to be 90 days or more. (8) Microscopic evidence of both glandular and stromal elements must be demonstrable.

Accordingly menstrual flow was collected aseptically and injected immediately in the same patient. The site of injection was selected where subsequent laparotomy was already planned to be done for other pathology—viz: myomas. Injection was made in the lower midline just above the symphysis and just superficial to the anterior fascial aponeurosis.

Eight cases have thus far been treated by implantation. One case showed the positive development of an endometrioma after 175 days. Two more cases showed peculiar scar reaction after 110 days and 183 days respectively, although these latter two were not interpreted microscopically as endometriosis.

It has thus been shown that "shed" fragments of endometrium cast off at time of menstruation are indeed viable and can cause endometriosis. Further, it has been shown that "Sampson's theory of the Histeogenesis of Endometriosis" may now be "Sampson's Histeogenesis of Endometriosis".

NEW MEMBERS OF THE M. A. G.

<i>Name</i>	<i>Address</i>	<i>Classification</i>	<i>County Society</i>
Allen, Calvin F., Jr.	Hall County Hospital, Gainesville	Active	Hall
Atkinson, Theodore E.	Crawford Long Mem. Hospital, Atlanta	DE-2	Fulton
Butterworth, Henry H., Jr.	603 Church Street, Decatur	Active	DeKalb
Caffey, Helen Mead	Georgia Baptist Hospital, Atlanta 3	DE-2	Fulton
Carter, Robert Harold	Georgia Baptist Hospital, Atlanta 3	DE-2	Fulton
Compton, W. S.	66 Main Street, Lithonia	Active	DeKalb
Denes, Robert	3-D Country Club Apts., Augusta	DE-2	Richmond
Edmondson, Henry Turner	4315 Wievca Rd., N.E., Atlanta 5	Active	Fulton
Garner, Robert C.	33 Ponce de Leon Avenue, Decatur	Active	Fulton
Hamilton, Catherine Latane	Talmadge Memorial Hospital, Augusta	DE-2	Richmond
Harding, H. J. P., Jr.	Crawford Long Mem. Hospital, Atlanta	DE-2	Fulton
Harrison, Clyde C., Jr.	Georgia Baptist Hospital, Atlanta	DE-2	Fulton
Henderson, Neil C.	35 Linden Ave., N.E., Atlanta	DE-2	Fulton
Hodnett, James D.	1293 Peachtree Street, N.E., Atlanta	Active	Fulton
Killough, John Harvey	441 W. Peachtree Street, Atlanta 8	Active	Fulton
Kitchens, Darriel G.	University Hospital, Augusta	DE-2	Richmond
McAnulty, Martha Jane	402 W. Ponce de Leon Avenue, Decatur	Active	DeKalb
McDonald, James Kenneth	Talmadge Memorial Hospital, Augusta	DE-2	Richmond
Moore, Lewis William	1408 Cherokee Street, Marietta	Active	Cobb
Pentecost, Mark P., Jr.	Sheffield Bldg., Peachtree Street, Atlanta	Active	Fulton
Pirkle, Thomas N.	Box 435, Blue Ridge	Active	Blue Ridge
Randall, Alfred Henry, Jr.	205 Lawrence Street, Marietta	Active	Cobb
Sherrer, Webster A.	2820 Cornelia Road, Augusta	DE-2	Richmond
Stanley, Earl H.	Macon Hospital X-Ray Dept., Macon	Active	Bibb
Warnick, Lillian Pearl	12 Capitol Square, Atlanta	Active	Cobb
Wood, Robert Warner, Jr.	478 Peachtree Street, N.E., Atlanta 8	Active	Fulton



the association

WHY MEDICARE FORMS MUST BE COMPLETED

CORRECT COMPLETION OF MEDICARE forms has long been a problem. There is no easy answer; it can only be said that the claims must be complete as to all details. However, the problem no longer terminates at this point. Since the restrictions of October 1, 1958 many additional statements must be made and often permits must be submitted before the claim can be considered complete and processed for payment. Your attention is invited to Directive Medicare VII and VIII for details.

Government Program

Perhaps the ultimate reason for rigid completion of claims lies in the governmental nature of the program.

All disbursements of public funds must be authorized by congressional appropriation. To insure that only disbursements within the law are made Congress attaches certain administrative regulations. The funds are then made available to an executive agent, in this case the Office for Dependents Medicare, Department of the Army. This executive agency in turn establishes state disbursing agents with authority to write checks against these funds; provided that the regulations are strictly obeyed.

The ground rules or administrative regulations are, of course, passed on down the line until they reach the individual doctor.

Requirements of Public Law

The public law authorizes care for specified persons only. It also requires certain statistical data be submitted to Congress in order that they might justify the expenditure to the tax payers. Claim form items 1-14 and related permits provide this information when properly completed.

The law further provides that only duly licensed physicians can be paid for the authorized types of care. Claim form items 15-23 provide this information and assures the tax-payer that only care within the intent of Congress is paid to persons authorized to render such care.

The physician is also required to make his normal charge as he would to a private patient with an annual income of \$4,500. He must certify that he will comply with the full service feature of the program; that is, he will accept the Medicare fee as full payment. Although this is not a specific part of the law as such, the Department of Defense Directive has made it so; therefore, claim form items 24-29 must be completed.

Protect Yourself—Complete the Claim

The common sense reasons for the Medical Association of Georgia requesting the doctor to comply with the government's requirements are as follows: (1) Proper completion of every item by the physician avoids the possibility of later government inquiries and related refunds. It protects the physician. (2) The MAG can not complete doctors' claims for them for to do so would be a punishable crime.

Conclusion

Completion of claims should be of prime interest to all doctors in order to protect themselves as well as the interests of the taxpayers. It should also be borne in mind that these requirements are imposed by the people who are paying the bill—the taxpayers. It will be appreciated if these reasons and requirements are kept in mind when completing Medicare forms.

Above all remember that the requirements of the program are those of the government and not of the Medical Association of Georgia.

ANNOUNCEMENTS

Postgraduate course on Diseases of the Chest, presented by the American College of Chest Physicians, Sir Francis Drake Hotel, San Francisco, Calif., February 16-20, 1959. The most recent advances in the diagnosis and treatment of heart and lung diseases, medical and surgical aspects. Tuition for five day course, \$100, including luncheon meetings. For further information write the Executive Director, American College of Chest Physicians, 112 East Chestnut St., Chicago 11, Illinois.

Sectional meeting of the American College of Surgeons, Charleston, S. C., Francis Marion Hotel, January 19, 20, and 21. Program covers many topics of current concern including trauma, cancer, arterial, occlusive disease, management of gastrointestinal tract hemorrhage, and abdominal emergencies. Luncheon programs are being scheduled at which morning presentations will be discussed and numerous papers will be presented. Reception for surgeons and wives will be held Tuesday evening, January 20. There will be a Fellowship Luncheon featuring a panel discussion by College officials on activities of the College. One morning of clinics at Medical College of S. C. will be included in the program.

DEATHS

DANIEL C. ELKIN, 65, died November 3, 1958.

After graduating from Phillips Academy and Yale University, Dr. Elkin received his medical degree from Emory University and interned at Peter Brent Brigham Hospital in Boston, Mass. He returned to Atlanta in 1923 and joined the faculty of Emory University.

Dr. Elkin served as chairman of the department of surgery of the Emory University Medical School for 23 years prior to his retirement in 1954. A native of Kentucky, he returned to his home state after his retirement and was making his home at Lancaster at the time of his death.

In 1957 Dr. Elkin served as president of the American College of Surgeons. He had served as president of the American Surgical Association, the Society for Clinical Surgery, and the Southern Surgical Association. Distinguished in the profession for his work in surgery of the heart and blood vessels, he developed many techniques in cardio-vascular surgery.

In World War II he served in the Army and attained the rank of colonel. In 1949 he became a brigadier general in the reserve. His Army service won him the Legion of Merit citation.

Survivors include his widow, the former Helen McCarty of Atlanta, and a son, Daniel C. Elkin, Jr.

GEORGE T. HARPER of the Nuberg community of Hart county, died September 30 at the age of 72.

He was a graduate of Young Harris College. After receiving his medical degree from Emory University School of Medicine, he began the practice of medicine in Hart county and was in active practice for 46 years.

Dr. Harper was a member of the Bethesda Methodist Church, an honorary steward of the church, and was active in the Sunday School.

In addition to his widow he is survived by one daughter, Mrs. Harold B. Teasley of the Nuberg community; three sons, Dr. Jack T. Harper of Mattoon, Illinois, George W. Harper of Anderson, S. C., and Capt. Robert L. Harper of Fort Missoula, Montana; two sisters, Mrs. Mattie Mae Mathis of Elberton, and Mrs. Emma Lunsford, Greenwood; two brothers, Jesse W. Harper and Ernest W. Harper, both of Hartwell.

N. R. THOMAS, Albany, died October 2, 1958 at the age of 76.

A native of Blue Ridge, Georgia, Dr. Thomas received his medical education at the Atlanta School of Medicine, now known as Emory University Medical School. He began his practice in North Georgia, later moving to Milledgeville, where he lived for eight years.

He served in the Medical Corps of the U. S. Army during World War I.

Dr. Thomas moved to Albany in 1925 where he was engaged in the practice of medicine for 31 years until his retirement in 1956. At that time he was chief of obstetrics and also served as chief of staff for several years at Phoebe Putney Hospital.

Dr. Thomas was a member of the First Baptist Church, emeritus member of Dougherty Lodge 591, F&AM, Hasan Temple, Dougherty County Medical Society, American Medical Association, and the Georgia Society of Obstetrics and Gynecology.

Surviving in addition to his wife are one son, Dr. Frank E. Thomas of Albany; a daughter, Mrs. J. LeConte Tally of Augusta; and several grandchildren.

SOCIETIES

At a recent meeting of the COWETA COUNTY MEDICAL SOCIETY the following were elected to serve as officers for the coming year: J. G. Wells, president; C. W. Farmer, vice-president; and J. O. St. John, secretary.

The Society also voted to conduct a "Dollar Polio Vaccination" program similar to the highly successful programs recently completed by other county societies.

Arthur M. Knight, Jr. of Waycross was guest speaker at a recent meeting of the WARE COUNTY MEDICAL SOCIETY. He presented a talk on the diagnosis and treatment of anemia. Katherine Hendry, vice president, presided in the absence of Walter E. Lee, president of the society. Hosts for the meeting were W. F. Reavis, H. A. Seaman, and Vilda Shuman.

The NEWTON COUNTY MEDICAL SOCIETY is presenting a series of articles in the *Covington News* on the Blood Program in Newton County. The articles are written in an effort to stress the urgent need of blood for use in the Newton County Hospital.

The HALL COUNTY MEDICAL SOCIETY and the Hall County Health Department have completed their third annual "Diabetes Detection Week." During this week free urinalysis and free tests for diabetes were offered.

The THIRD DISTRICT MEDICAL SOCIETY met in Columbus in October at the Columbus Country Club. In conjunction with this meeting the Chattahoochee Valley Fall Clinic was held. 173 physicians and their wives attended. New officers elected for the coming year are Maurice Arnold, Hawkinsville, President; R. N. Martin, Cuthbert, Vice President; Frank Wilson, Leslie, Secretary; and W. P. Jordan, vice councilor, Third District. Henry Boyter was appointed as representative to Talmadge Memorial Hospital.

THE FOURTH DISTRICT MEDICAL SOCIETY met in November at the Elk's Club in Griffin. An afternoon scientific session was presented by the members of the society and consisted of papers by E. E. Proctor and Drs. Black and Fitzhugh.

Lawyers and their wives were invited to the Evening Session. After refreshment and dinner hours, the guest speaker, Dr. Geoffrey Mann, Medical Examiner for the States of Virginia, spoke on "Problem Cases That Come Into the Medical Examiner's Office." His talk was profusely illustrated with slides.

PERSONALS

First District

DR. AND MRS. CURTIS G. HAMES of Claxton have recently returned from San Francisco, California, where Dr. Hames attended the annual meeting of the

American Heart Association and the Society for the Study of Atherosclerosis.

At a convocation held in Chicago, Illinois in October, G. B. HOGSETTE, Sylvania, was admitted to the American College of Surgeons.

Second District

PAUL WARREN LUCAS, Tifton, was guest speaker at a recent meeting of the Chula PTA.

Third District

JACK McGEE and A. C. HOBBS were elected to fellowship in the American College of Surgeons at its annual meeting in Chicago. Other doctors attending from Columbus were EDGAR B. HORN, A. B. CONGER, HUGH J. BICKERSTAFF, ROY L. GIBSON, and LUTHER H. WOLFF.

Fourth District

No news submitted.

Fifth District

J. WILLIS HURST, Atlanta, was one of the principal speakers at the organizational meeting for the Carroll County Heart Council held in Carrollton recently.

Among the speakers who took part in a cancer symposium for Georgia doctors held at the Hughes Spalding Pavillion of Grady Memorial Hospital were A. H. LETTON, Atlanta, who spoke on "Carcinoma of the Breast"; OSLER ABBOTT, Atlanta, who discussed "Carcinoma of the Lung"; and ROBERT L. BROWN of Atlanta who spoke on "The Palliative Treatment of Terminal Cancer Patients."

CARL C. AVEN, Atlanta, recently addressed the members of the Gainesville Rotary Club. His talk was sponsored by the North Georgia Tuberculosis Association.

JOHN D. CAMPBELL, Atlanta, announces that he has returned to this office in the Doctors Building for the practice of Psychiatry.

As a guest speaker at the meeting of the Mid-Atlantic Section of the International College of Surgeons which was held in Hot Springs, Virginia in November, A. H. LETTON presented the paper, "The Use of Roux-Y

Anastomosis in the Treatment of Various Pancreatic Diseases."

BERNARD S. LIPMAN of Atlanta was guest lecturer at a post-graduate course in Advanced Clinical Electrocardiography which was given by the University of Tennessee College of Medicine in Memphis, Tennessee.

Sixth District

DR. AND BRS. ZEB BURRELL, JR. have returned to their home in Milledgeville after a trip to New York where Dr. Burrell presented a paper to a world wide symposium sponsored by the New York Academy of Science. The subject of the symposium was "Newer Agents In The Treatment of Diabetes."

O. H. CHEEK, Public Health Commission for Laurens County, has received an award for over 35 years of service with the State Department of Public Health.

Seventh District

No news submitted.

Eighth District

HAROLD W. MUECKE of Waycross attended the 26th annual scientific meeting of the Georgia Pediatric Society held recently at the Mayfair Club in Atlanta.

Ninth District

DR. AND MRS. CHARLES ANDREWS, DR. AND MRS. ARTHUR HENDRIX of Canton, and DR. AND MRS. RAFE BANKS, JR., Gainesville, attended the meeting of the Georgia Chapter of the American College of Surgeons held recently at Sea Island.

Tenth District

Addressing the members of the North Augusta Mothers' Club at a recent meeting, PRESTON D. ELLINGTON, Augusta, chose the subject "Until the Doctor Comes." He discussed accident prevention, adequate protective measures, and emergency treatment in the home.

At the tenth Annual Literary Achievement Awards banquet of the Georgia Writers Association, CORBETT H. THIGPEN and HERVEY M. CLECKLEY of Augusta, authors of "The Three Faces of Eve," received top honors in the non-fiction writing field.

NEW METHOD FOR REPORTING COMMUNICABLE DISEASES

THE GEORGIA DEPARTMENT OF PUBLIC HEALTH has devised a new, simpler method for the reporting of communicable disease by physicians. This new method went into effect November 15, 1958 and by that date every physician practicing in the State of Georgia had received a copy of the new tally sheet and a letter describing it. This system of reporting has the advantage of conserving the time of practicing physicians and also of providing information of greater accuracy to the Department of Health.

Ten per cent of the general practitioners and ten per cent of the pediatricians in the state will receive a report request each week. Weekly sampling of the 1,194 general practitioners and pediatricians in Georgia who might reasonably be expected to see and report communicable diseases would reflect the gen-

eral experience closely enough to satisfy most needs. Occasionally, a physician may receive a request on two or more consecutive weeks since the selection of addresses will be at random within a geographical area. On the average, however, a tally sheet will be received once in ten weeks. Weekly morbidity estimates will be made from the sample.

Consistent reporting will provide the background information for which physicians ask when preparing papers and discussions for textbook articles. Data will more accurately reflect the average experience of physicians in practice and will contribute materially to effective understanding between physicians, legislators, health workers, and not least, with the general public.

MINUTES OF PUBLIC SERVICE COMMITTEE MEETING

PUBLIC SERVICE COMMITTEE Chairman John P. Heard, Decatur, called the meeting of the Association Public Service Committee to order at 2:00 P.M. Sunday, November 2, 1958.

Members of the Committee present included: John P. Heard, Decatur, Chairman; Albert M. Boozer, Dalton; E. C. McMillan, Macon; Dan H. Kahle, Atlanta; and Mr. John F. Kiser of the MAG Headquarters Office.

President and Secretary Conference

Dr. Heard brought up the matter of the Presidents and Secretaries Conference to be sponsored by the MAG for all county society officers early in 1959. The Committee generally voiced approval of this project. Dr. McMillan was appointed as Chairman of a subcommittee to organize this meeting in January or February in Macon. Mr. Kiser was instructed to write AMA for exchange material in regard to this matter. Dr. Heard stated that he planned to budget approximately \$500 for this project.

It was tentatively agreed that a meeting would be held to discuss this matter at 5:00 P.M., Thursday, November 13, in the MAG Headquarters Office, and Drs. McMillan, Heard, McLoughlin, Mr. Kiser, and Mr. Krueger will be invited to be present.

Series of Booklets

The next item of business was a discussion of publication of a county society officers' handbook to be prepared by the first of the year, and to be presented at the Conference. Dr. Heard appointed Dr. Kahle to work with the MAG staff in connection with this project. Mr. Kiser was instructed to write the AMA for exchange material on this subject.

Annual Session Newspaper Supplements

Dr. Heard discussed the possibility of a supplement to newspapers on Sunday prior to the MAG Annual Session. He explained that this would be handled by the individual papers in the major cities in Georgia.

Other subjects discussed were Science Fair On Wheels, Spot Radio And TV Information, and Paramedical Recruitment. Dr. Heard reported on a meeting he had held with Mrs. Porter of the Woman's Auxiliary in regard to paramedical recruitment at which time her program and project were outlined. On motion (McMillan-Boozer) it was voted that the Public Service Committee recommend to MAG Council full MAG approval of this fine and worthy project.

For information of the members of the Committee, Dr. Kahle discussed the possibility of setting up a Jaycee professional advisory committee in Georgia composed of representatives from the Georgia Dental Association, Medical Association of Georgia, Health Department, and the Georgia Hospital Association.

There being no further business the meeting was adjourned.

EXECUTIVE COMMITTEE OF COUNCIL PHONE CALL CONFERENCE

CHAIRMAN DILLINGER CALLED the Executive Committee of Council Phone Call Conference meeting to order at 5:15 P.M., October 30, 1958.

Members of the Executive Committee present in addition to Dr. Dillinger were Lee Howard, Sr., Savannah, President; W. Bruce Schaefer, Toccoa, Immediate Past-President; Chris J. McLoughlin, Atlanta, Secretary-Treasurer; and J. G. McDaniel, Atlanta, Chairman of the Finance Committee. Also present was Mr. M. D. Krueger, Executive Secretary.

Medicare Review Board Chairman Appointment

Dr. Dillinger called on Chris J. McLoughlin who reported that certain doctors have been contacted, but as yet no one has been able to accept the Chairmanship of the Medicare Review Board. Efforts will continue to be made to find someone to fill this post.

MAG Building Committee Report

Chairman Dillinger called on Chris J. McLoughlin, Chairman of the Council Building Committee, who reported on the status and progress of his Committee in negotiating the purchase of a suitable MAG Headquarters Office Building. Dr. McLoughlin said that present negotiation is delayed but his Committee will continue to seek building sites.

Council Finance Committee Report

Chairman Dillinger called on J. F. McDaniel, Chairman of the Council Committee on Finance, who reported that the budget is in excellent shape, and the Association should have a good year. On motion (Schaefer-Howard) it was unanimously voted to approve the budget report.

Veterans and Military Dependents Care Meeting December 1, Minneapolis MAG Representative

Mr. Krueger read a letter from the American Medical Association concerning sending a representative to the conference on Veterans' and Military Dependents' Medical Care, on December 1, which is the day before the opening of the Clinical Session of the AMA. On motion (Schaefer-McDaniel) it was unanimously voted that Dr. McLoughlin attend this conference, and that Eustace Allen be invited to attend, if he so wishes.

Date & Site of Executive Committee of Council November Meeting

Dr. Dillinger suggested that this Committee meet at 1 P.M., November 23, following the Finance Committee meeting that morning. It was unanimously voted that the Executive Committee of Council meet at that time.

New Business

Dr. McLoughlin read excerpts from a letter from Dr. George Harrell, Dean of the University of Florida Medical School, in which Dr. Harrell invited Georgia doctors to send their patients to the Florida Medical School Hospital. General discussion ensued. On motion (Schaefer-McDaniel) it was voted to defer the letter to the Council of MAG at its December meeting.

There being no further business, the meeting was adjourned.

MINUTES OF MAG COMMITTEE ON MENTAL HEALTH MEETING

THE FIRST MEETING of the 1958-1959 Medical Association of Georgia Committee on Mental Health was called to order at 1:30 P.M., Sunday, October 12, 1958 in the MAG Offices, Academy of Medicine, Atlanta, Georgia.

Members of the Committee present were: Chairman Rives Chalmers, Atlanta; T. J. Vansant, Marietta; Richard Felder, Atlanta; R. J. Van de Wetering, Atlanta; Paul Scoggins, Commerce; Trawick Stubbs, Atlanta; and Mr. John F. Kiser of the Headquarters Office Staff.

Dr. Chalmers reviewed past committee activities.

Intensive Treatment Program of the State Health Department

In his report, Dr. Stubbs described how patients are referred into the program; the financial aspects of the program; and described briefly the three hospitals now receiving patients at Augusta, Macon, and Columbus.

The Committee members discussed how physicians could be informed of this program of the State Health Department. It was voted to appoint a sub-committee (to consist of Richard Felder, Atlanta, Chairman; Paul Scoggins, Commerce; and T. J. Vansant, Marietta) to meet with Dr. Stubbs and prepare information concerning the program to go to MAG members. It was understood that this sub-committee would be authorized to decide how the material would be mailed or published.

Dr. Stubbs discussed the possibilities of organizing a planning meeting to draw up an overall plan for the future of the program. After discussion, it was voted to authorize the MAG Mental Health Committee to participate in this meeting to plan a continuing education program for physicians.

New Mental Health Law

The next item of business was the matter of legal problems developing in connection with the new mental health law adopted by the 1958 Georgia General Assembly. After discussion, it was voted to authorize Dr. Van de Wetering to investigate this matter, particularly concerning the legal liability of ordinary physicians in connection with the commitment procedures, and to report back at the next meeting of the committee.

Postgraduate Courses for General Practitioners

Dr. Van de Wetering reported that he is the Georgia Coordinator for the American Psychiatric Association to work with the Georgia Academy of General Practice in connection with this problem. It was also learned that M. F. Simmons

had been appointed by the AAGP to represent the general practitioners. The committee went on record in favor of this project and voted to participate in setting up such a post-graduate course. Dr. Van de Wetering was to report back at the next meeting of the committee.

Mental Health

Dr. Felder explained the background of this project, and after discussion it was voted to request Mr. Kiser to assist Dr. Felder in setting up this page in the *Journal of the Medical Association of Georgia* similar to the current heart page in the *Journal*.

Letter to County and District Societies

Mr. Kiser was instructed to write county and district societies inquiring as to their interests in mental health problems. The letter to county societies is a request for them to establish a committee on mental health and to report such an appointment to the MAG office, and also to inform MAG of any suggestions or questions or activities for the state Mental Health Committee. It was requested that district societies be notified to request permission for a five minute report from a committee member on activities of the committee.

Dr. Chalmers informed the committee that he would attend the meeting of State Mental Health Committee Chairmen in Chicago in November as provided for in the budget. It was suggested for committee members that the budget for 1959 be the same as 1958—\$200.

The possibility of the next meeting being held at Talmadge Memorial Hospital was discussed. This meeting will probably be held in January or February.

There being no further business, the meeting was adjourned.

INSTITUTION-PHYSICIAN RELATIONS COMMITTEE MEETING MINUTES

THE COUNCIL COMMITTEE on Institution-Physician Relations was called to order by Chairman F. G. Eldridge, Valdosta, at 10:45 P.M., October 19, 1958 in the Pine Room, Dempsey Hotel, Macon, Georgia.

Members of the Committee present included F. G. Eldridge, Valdosta, Chairman; Stewart D. Brown, Jr., Royston; Lester Rumble, Atlanta; and George Schussler, Columbus. Also in attendance was MAG President Lee Howard, Sr. of Savannah, Ex-Officio member of the Committee, and Mr. M. D. Krueger, MAG Headquarters Office Staff.

Five Principals of Standards

Chairman Eldridge read the MAG House of Delegates adopted Five Principals of Standards for the specialties of radiology, pathology, anesthesiology, and physical medicine as follows:

- "(1) Adequate service guaranteed by physicians to satisfy the needs and requirements of the members of the medical staff of the hospital.
- "(2) Charge for services rendered by these physicians must be in the name of the physician or physicians rendering the service.
- "(3) That no employer-employee relationship exist between the hospital and the physician as such relationship is unethical and illegal.
- "(4) Any arrangements made with the hospital by the physician should be of such a nature as to require payment for his professional services by Blue Shield rather than Blue Cross and this strongly recommended.
- "(5) These basic principles of medical ethics so stated should apply to all hospitals admitting 'pay patients' regardless of size and to all physicians practicing in the State of Georgia."

Chairman Eldridge then discussed these principals and by general agreement it was moved that a letter should be drafted by the Committee to inform the medical profession and certain interested lay parties of these principals so that the Committee could later implement and augment these standards in Georgia. By general agreement it was recommended that each member of the Committee attending this meeting should draft a letter informing these groups of these principals and standards of ethical and legal conduct and send this draft to Dr. Eldridge who would then draft a composite letter which would be sent

back to the Committee and, upon Committee approval, be presented to Council for approval then sent to the following groups:

- (1) County Medical Society Officers
- (2) Specialty Society Officers
- (3) Chiefs of Hospital Staffs
- (4) Published prominently in *MAG Journal*
- (5) Request the Georgia Association of Pathologists, Georgia Radiological Society, and Georgia Anesthesiology Society to send a similar letter to their own membership
- (6) County Medical Society Editors of County Medical Society Publications
- (7) Hospital Administrators
- (8) Insurance Companies
- (9) State Board of Medical Examiners
- (10) Hospital Governing Boards Trustees
- (11) Georgia Hospital Association

It was further approved by general agreement that the Specialty Societies of radiology, pathology, and anesthesiology be requested to send the questionnaire to their membership ascertaining the status of their members as regards the arrangements between the physicians and the hospital and render this information to the Institution-Physician Relations Committee by March 1, 1959.

Date and Site of Next Meeting

By general agreement it was voted that the date and site of the next meeting of the Institution-Physician Relations Committee be left to the discretion of Chairman Eldridge.

There being no further business the meeting was adjourned at 12:40 P.M.

MINUTES OF RURAL HEALTH COMMITTEE MEETING

THE RURAL HEALTH Committee of the Medical Association of Georgia was called to order by Chairman Albert Morris, Fairburn, at 11:05 A.M. in the Pine Room, Dempsey Hotel, Macon, Georgia on October 26, 1958.

Clarkesville Laboratory School

Chairman Morris reported on the progress and status of the Laboratory Assistants School at Clarksville and on motion duly made and seconded it was voted that the Rural Health Committee support and endorse the activity of this course of training as instituted at the Clarksville Vocational School.

Junior Day Program

H. C. Derrick reported on the purpose and progress of the Junior Day programs for 1959. He stated that both Deans of the two medical schools in Georgia had been written requesting they choose a Saturday afternoon in January or February of 1959 for this event to be slated. Dr. Derrick explained that the Georgia Academy of General Practice was sponsoring the Junior Day program, but on motion duly made and seconded it was voted that the Rural Health Committee of the Medical Association of Georgia should co-sponsor these Junior Day programs under the direction of Rural Health Committee member Howard Derrick.

Weekly Newspaper Health Column

Dr. Derrick reported that the MAG had appointed a special Weekly Newspaper Health Column Committee to continue the "Doc Mag Says" newspaper health column project instituted by the Rural Health Committee and the Public Relations Committee. On motion (Cason-McArthur) it was voted that the "Doc Mag Says" series of weekly newspaper health columns be continued, and that the MAG be strongly urged to continue this project during 1959. It was further recommended that either Chairman Morris or H. C. Derrick meet with the Farm Bureau members at their convention in Albany to publicize and obtain support for the "Doc Mag Says" weekly newspaper health column project.

Poison Centers and Poison Pamphlets

By general agreement it was recommended that Chairman Albert Morris contact the Georgia Health Department to urge the institution of poison information centers in the large metropolitan centers in the state of Georgia. It was further recommended

that as these centers are established, the physicians in Georgia should be informed of their services and availability.

Hospital Chaplains

It was recommended that Dr. Katrine Hawkins direct the project of urging every hospital in Georgia to make arrangements to have a chaplain. It was further recommended that a survey be done of the hospitals in Georgia having over 15 beds to see what type of arrangements for ministerial liaison is presently in force. After this survey is completed, it was recommended that Dr. Hawkins then work with interested groups, namely, county medical societies, hospital administrators, Georgia Hospital Association, Hospital Governing Boards, etc. to effect a better ministerial liaison in the hospitals not having any arrangements as shown in the survey.

Paramedical Recruitment Pamphlets

Chairman Morris reported for John Heard, Chairman of the Association Public Relations Committee. Dr. Heard had stated that at present the Paramedical Recruitment Pamphlet was in the hands of the printer. It was recommended that the distribution of this paramedical recruitment pamphlet be handled under the direction of Miss Higginbotham. The number of booklets to be printed was to be decided upon jointly by Miss Higginbotham, Chairman Morris, and Dr. Heard.

Health Insurance Pamphlets

Chairman Morris discussed the prepared material for a health insurance pamphlet giving information on the various types of health insurance available for the public. It was recommended

that 15,000 of the pamphlets be distributed by Miss Higginbotham; 3,000 of these pamphlets to be sent to the members of the MAG. It was further recommended that the material be sent to each member of the Committee for comment and returned to the Chairman; the chairman then to compile the material. It was further recommended that Chairman Morris request \$800 for the printing of this Health Insurance pamphlet from the Finance Committee of the MAG and that Dr. Morris appear in person at that meeting to emphasize this request.

4-H Club Health Form

Miss Marian Fisher discussed the need for a health form to be filled out by physicians for 4-H Club members attending the annual summer encampments at Rock Eagle, Georgia. It was recommended that certain minimum medical requirements be put on this form and the form be similar to the safety patrol and boy scout health form. Chairman Morris appointed Dr. McArthur to draft such a simple form with the deliveration of Miss Fisher and Miss Higginbotham for their use as soon as completed.

Date and Site of Next Rural Health Committee Meeting

By general agreement it was recommended that the next Rural Health Committee meeting be held at the Continuing Education Center in Athens, Georgia on either February 1, 1959 or February 8, 1959 at 11:00 A.M. and the arrangements for either of these dates to be made by Miss Higginbotham.

There being no further business Chairman Morris called the meeting adjourned.

NEWLY LICENSED PHYSICIANS IN GEORGIA

Name	Address
Gene Harland Abels	2010 Central Ave., Augusta, Ga.
Hubert Torrey Bloodworth	828 N. Garden Terr., Macon, Ga.
Uriah Hoyt Bodie, Jr.,	801 Mobley St., Johnston, S. C.
Carl John Brunoehler	2643 Arlene Way, N. H., Atlanta, Ga.
Stevens Byars	401 Highland Ave., Monroe, Ga.
George Lafayette Carr	c/o Mrs. Mae Ragsdale, Demorest, Ga.
Beverly Woodfin Cobbs, Jr.	Emory University, Atlanta 22, Ga.
Alexis Hal Davison	2888 Habersham Rd., N. W., Atlanta, Ga.
William Robert Fowler	Suite 309 Doctors Bldg., Chattanooga, Tenn.
Whitman Fraser	Hinesville, Ga.
Robert Carlyle Garner	33Ponce de Leon, N.E., Atlanta, Ga.
Allen August Gleitz	Cairo, Ga.
Howard Dean Huenergardt	Watkins Memorial Hosp., Ellijay, Ga.
Robert C. Innes	3605 Bull St., Apt. 4, Savannah, Ga.
Rex Robert Johnson	6144 Overhill Dr., Louisville, Ky.
Robert Young Lambert	2665 Buford Hwy., Atlanta 5, Ga.
Lillian Malone	Maxwell House, Apt. 821, Augusta, Ga.
George Roland McElroy, Jr.	3116 Haywood Dr., Chattanooga, Tenn.
Guillermo Julian Munoz	750 Brunswick Ave., Trenton 8, N. J.
Milledge Clark Newton	3360 Ridge Ave., Macon, Ga.
Richard Clare Parsons	Box 395, Grady Hospital, Atlanta, Ga.
Daniel Wells Pratt	Emory University Clinic, Atlanta 22, Ga.
Quentin Price	11 B Country Club Apts., Columbus, Ga.
Robert Carl Schlant	Emory University School of Medicine, 69 Butler St., S.E., Atlanta 3, Ga.
Earl H. Stanley	Macon General Hospital, Radiology Dept., Macon, Ga.
Philip Stephen Woodbury	Rochelle, Ga.
Samuel Kaplan	Venice, Florida

Note: Licenses Issued by Reciprocity.

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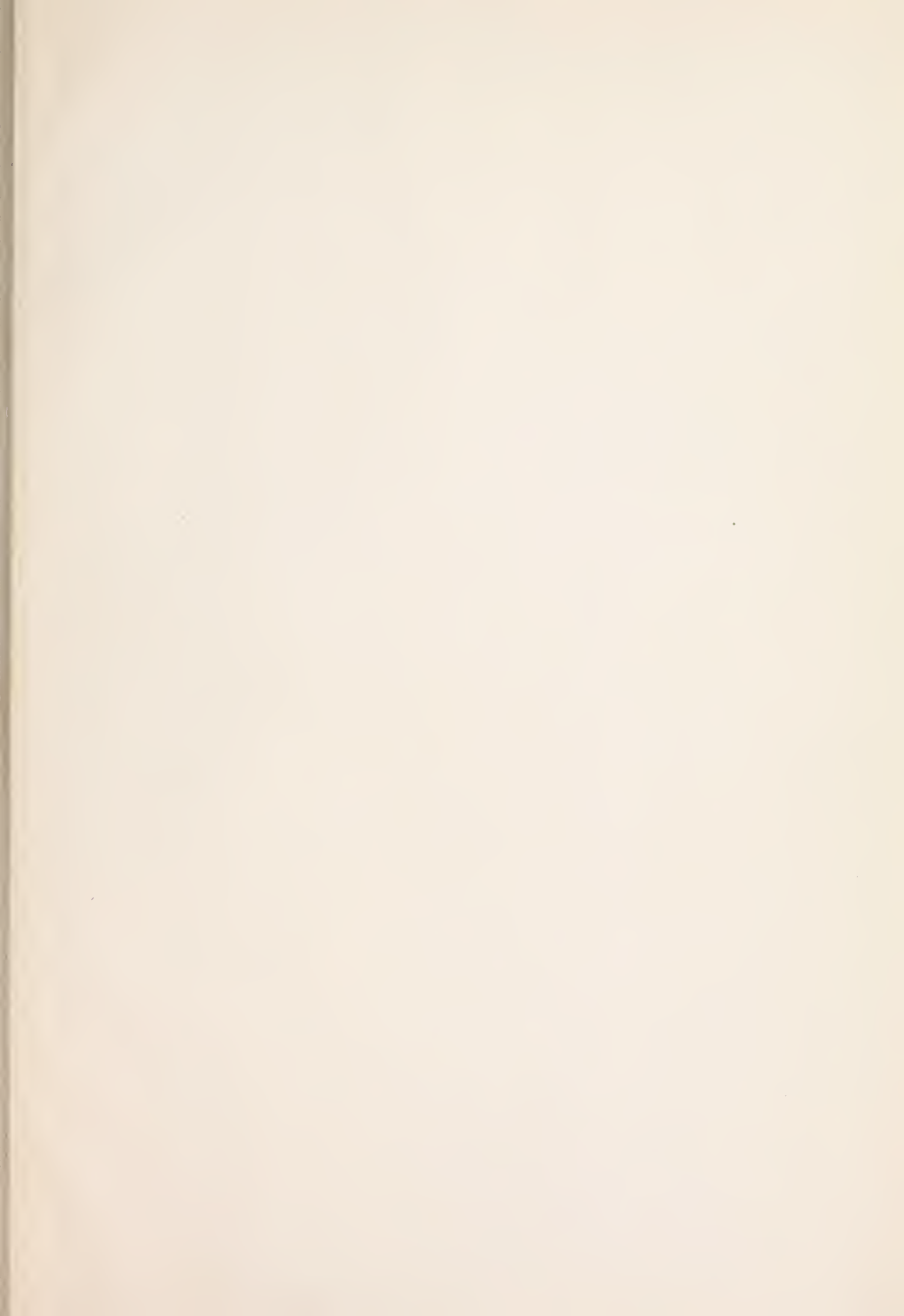
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